

**THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY**

D.T.E. 05-27

**DIRECT TESTIMONY OF
JOSEPH A. FERRO**

— OPERATING REVENUE AND BILLING DETERMINANTS —

**IN SUPPORT OF
BAY STATE GAS COMPANY'S
REQUEST FOR INCREASE IN BASE REVENUE
AND OTHER RATE MODIFICATIONS**

EXH. BSG/JAF-1

APRIL 27, 2005

TABLE OF CONTENTS

I. INTRODUCTION..... 1

II. PURPOSE AND SUMMARY OF TESTIMONY..... 3

III. OVERVIEW OF TESTIMONY 5

IV. DERIVATION OF TEST YEAR BILLING DETERMINANTS AND TEST YEAR
BASE REVENUES 7

V. TEST YEAR WEATHER NORMALIZATION ADJUSTMENT..... 18

VII PRO FORMA TEST YEAR REVENUES..... 34

VIII. OTHER REVENUE ADJUSTMENTS – FEES..... 37

IX. CONCLUSION.....42

1 1998, I was promoted to Director of Pricing Services. On August 16, 1999, I
2 became Director, Revenue Development. At approximately the time of the
3 consummation of the merger between NiSource Inc. ("NiSource") and Columbia
4 Energy Group ("Columbia") (around November 1, 2000), I was assigned my
5 current position of Manager, Regulatory Policy.
6

7 Q. What are the primary responsibilities in the various positions that you have held
8 in the Regulatory Affairs and Rate areas for Bay State and Northern?

9 A. My primary responsibilities for Bay State and Northern throughout my years of
10 service have included the preparation and support of Cost of Gas Adjustment
11 ("CGA") filings, analyses and forecasting of rates and revenues, supporting
12 adjustments to test year costs as well as determining and sponsoring revenues and
13 billing determinants in rate case filings and other rate-related functions.
14

15 As Director of Pricing Services and Director, Revenue Development, my
16 responsibilities expanded to include directing the analysis and filing of rate design
17 proposals including unbundling initiatives, analyzing the feasibility and filing of
18 special rate contracts, administering all rate tariffs, as well as providing both Bay
19 State and Northern with competitive pricing assessments and implementing
20 effective pricing to enhance their ability to retain and grow distribution load.
21

1 In my current position of Manager, Regulatory Policy, my responsibilities include
2 setting regulatory and pricing policy and carrying out associated initiatives.

3

4 Q. Are you a member of any industry organizations?

5 A. Yes. I am a member of the Northeast Gas Association (“NGA”) (formerly, New
6 England Gas Association) Rates and Planning Group and a member of the
7 American Gas Association (“AGA”) Rates and Strategic Issues Committee.

8

9 Q. Have you previously testified before any regulatory bodies?

10 A. Yes. I have testified before the Massachusetts Department of
11 Telecommunications and Energy (formerly the Department of Public Utilities)
12 (“the Department”), the Maine Public Utilities Commission (the “Maine PUC”)
13 and the New Hampshire Public Utilities Commission (the “NHPUC”).

14

15 **II. PURPOSE AND SUMMARY OF TESTIMONY**

16 Q. Please explain the purpose of your prepared direct testimony in this proceeding.

17 A. I have been asked by Bay State to prepare and support through my testimony
18 (Exhibit BSG/JAF-1) the Company’s test year billing determinants and revenues.
19 I will also use these determinants and revenues to support a rate design in my
20 Rate Design testimony (Exhibit BSG/JAF-2) that is consistent with Department

1 precedent and tariffs that set forth the updated, and in some cases new, rates,
2 services and adjustment mechanisms proposed in this proceeding.

3 In particular, I will present and support:

4 Test Year billing determinants, which represent the volumes or gas use of
5 customers in each month of the test year. These gas volumes are used to derive
6 test year revenues, and the rate components of base rates;

7 Test Year revenues, which are provided to Mr. Skirtich to reflect in his
8 determination of Bay State's revenue deficiency, and to Mr. Harrison for use in
9 his Allocated Cost of Service Study ("ACOSS").

10
11 In separate testimony (Exh. BSG/JAF-2), I support:

12 Rate design and the resulting base rates and bill impacts; and,
13 Annual rate adjustment process and mechanisms associated with the Steel
14 Infrastructure Replacement ("SIR") program, which is also discussed in the
15 testimony of Mr. Bryant, Mr. Cote, and Mr. Skirtich (Exhs. BSG/SHB-1,
16 BSG/DGC-1 and BSG/JES-1, respectively); and Performance Base Regulation
17 ("PBR") structure, which is also discussed in Mr. Bryant's and Mr. Kaufmann's
18 testimony (Exhs. BSG/SHB-1 and BSG/LRK-1, respectively).

19
20 In a final separate piece of testimony (Exh. BSG/JAF-3), I present Revised tariff
21 sheets associated with the proposed rate and service provision changes set out in

1 this case, including changes to the recovery of Pension and Postretirement
2 benefits other than pensions (“PBOP”) expenses, which is also discussed in Mr.
3 Barkauskas’ testimony (Exh. BSG/JAB-1).

4

5 **III. OVERVIEW OF TESTIMONY**

6 Q. Please provide an overview of this testimony on the test year billing determinants
7 and revenues.

8 A. In this section of my testimony I will be describing each step in developing test
9 year billing determinants and revenues. I will explain how billing determinants
10 were derived for the test year from the Company’s billing system and how the
11 billing determinants were normalized for weather (Schedules JAF-1-3, JAF-1-4,
12 JAF-1-5 and JAF-1-6). I will explain the derivation of the test year pro-forma
13 revenues based on current rates (Schedule JAF-1-2) and the Volumes and
14 Revenue Summary shown on Schedule JAF-1-1. I will also explain the
15 Company’s proposal for changes to its administrative fees and resulting
16 adjustment to Other Revenues (Schedules JAF-1-7, JAF-1-8 and JAF-1-9).

17

18 Q. Please provide a list and description of your schedules and workpapers.

19 A. My schedules and workpapers in support of the Company’s test year Billing
20 Determinants and Revenues, pertaining to the twelve months ending December
21 31, 2004 are as follows:

1 Schedule JAF-1-8: Meter Test Costs

2 Schedule JAF-1-9: Warrant and Locksmith Fees

3

4 Note that my workpapers, marked as WP JAF-1-1 through JAF-1-5, are
5 separately bound in a volume entitled Workpapers 2 - Ferro.

6 **IV. DERIVATION OF TEST YEAR BILLING DETERMINANTS AND TEST**
7 **YEAR BASE REVENUES**

8

9 Q. Please outline the steps used to derive test year billing determinants and test year
10 base revenues.

11 A. The steps taken to determine test year billing determinants were as follows:

- 12 1. Extract each customer's monthly billing use from the Company's
13 Customer Information System (CIS);
14
15 2. Aggregate customers into six groups, including
16 (1) Residential Heat; (2) Residential Non-heat; (3) C&I High Peak Period
17 (heat), Low and Medium Annual Use; (4) C&I Low Peak Period (non-
18 heat), Low and Medium Annual Use; (5) C&I High and Extra High
19 Annual, High Peak Period (heat); and (6) C&I High and Extra High
20 Annual, Low Peak Period (non-heat),
21
22 and weather normalize and convert billing month use to calendar month
23 use for the purpose of matching the billing period volumes and associated
24 revenues with the test year Company financials;
25
26 3. Accumulate, by rate class, gas volumes by head and tail block
27 consumption levels through a bill frequency analysis;
28
29 4. Weather normalize the calendar month use of the temperature-sensitive
30 rate classes and assign back to each customer its usage based on each
31 customer's ratio of sales volumes to class total volumes;
32

- 1 5. Perform a bill frequency analysis on weather normalized calendar month
2 sales volumes to derive test year billing determinants; and
3
4 6. Apply customer charge counts and weather normalized calendar month
5 volumes (by head and tail block) to current base rates to derive test year
6 base revenues.
7

8 Q. Mr. Ferro, before you begin describing each of the above listed steps, please
9 explain how Bay State's development of test year billing determinants and test
10 year base revenues in this case generally differs from how the Company
11 developed these test year figures in its previous rate cases?

12 A. One difference relates to the customer billing data. By mid-2003, Bay State
13 deployed radio-based automatic meter reading ("AMR") devices on all meters
14 that did not have current automatic meter reading capability. This technology was
15 not available in 1991, which was the Company's last test year. By having
16 automatic actual meter reading on virtually all its meters (at least 97%), the
17 Company has been able to receive, and use for billing, accurate actual meter
18 readings every month. In turn, the customer monthly billing volumes that Bay
19 State has been able to extract from its Customer Information System ("CIS")
20 accurately represents the customers' actual gas usage patterns, or physical flow of
21 gas. In past rate cases, the test year usage reflected estimated readings at least
22 every other month and manual actual readings less than half of the time. In
23 addition, monthly history of billing volumes, which reflected any necessary prior
24 month billing adjustments due to corrected meter readings, represented a

1 distortion of customers' actual monthly usage patterns. Thus, in the past the
2 Company relied on perusing the monthly financials to uncover noticeable billing
3 or prior month adjustments recorded in any rate class category. When uncovered,
4 the Company then investigated to which months the billing adjustments pertained,
5 and would make the appropriate adjustments before developing test year
6 revenues.

7
8 Today, the Company's billing data is significantly more representative of
9 customer's actual usage patterns than in the past. However, billing adjustments
10 for prior months that occurred during the test year are still mechanically
11 identified. Once identified, the adjustments are eliminated from the month in
12 which they were invoiced and assigned to previous months until the adjustment
13 was fully accounted for. In the case that an adjustment was for a month prior to
14 the test year, the adjustment was eliminated from the test year. The Company's
15 improved meter reading has resulted in physical flow billed volumes for the test
16 year being only 1,685,865 therms, or about 0.3% greater than booked billed
17 volumes of 621,078,670 therms.

18
19 Another difference is that the Company allocates the unbilled and weather
20 normalized usage volumes associated with each rate class grouping among each
21 customer in that class grouping, and then runs a calendar month weather

1 normalized bill frequency. Thus, the Company has performed two bill frequency
2 analyses; one on physical flow calendar month data, and another on the resulting
3 weather normalized calendar month data. In the past, the Company performed
4 only one bill frequency analysis on billing month data, and then adjusted those
5 results by a correction factor that represented the relationship between normalized
6 billing month and normalized calendar month usage volumes. By performing a
7 bill frequency on both physical flow calendar month and normalized calendar
8 month data, the Company is able to compare revenues generated from both sets of
9 monthly billing determinants (head/tail block volumes) and thus, better quantify
10 and reflect the revenue impact associated with weather normalization on a more
11 accurate incremental basis.

12
13 For instance, in past rate cases after determining the weather-normalized
14 adjustment to volumes, the Company would price out these volumes using an
15 incremental base rate. In this case, the revenue impact of weather represents the
16 difference of each customer's base revenues generated from physical flow
17 calendar month use versus normalized calendar month use.

18
19 A further difference is calculating the C&I weather normalization and unbilled
20 adjustments for four distinct groupings rather than by each rate class. As stated
21 earlier, the C&I groupings for weather normalization and unbilled purposes are as

1 follows: (1) C&I Low and Medium Annual Use, High Peak Period (G/T 40 &
2 41); (2) C&I High and Extra High Annual Use, High Peak Period (G/T 42 & 43);
3 (3) C&I Low and Medium Annual Use, Low Peak Period (G/T 50 & 51); and (4)
4 C&I High and Extra High Annual Use, Low Peak Period (G/T 52 & 53). The
5 Company chose these aggregated concepts to avoid an inconsistent data series
6 that result when customers switch among rates. This is a standard practice used
7 for the Company's modeling and forecasting activities. By providing data series
8 that are more consistent, superior analytical results occur. This provides
9 efficiency in both data handling and labor hours. As a test of the effect of this
10 practice on the normalization result for this case, the Company made the
11 calculations by rate class and found a difference in test year volume of less than
12 0.03%.

13
14 There are a few other differences that are described throughout this section of my
15 testimony that relate more to the details of calculations and are of less
16 significance in terms of the approach and process of developing the test year
17 billing determinants and test year base revenues.

18
19 Q. What has prompted the Company to employ this more systematic approach to
20 developing test year billing determinants and test year base revenues?

1 A. Since the Company's last filing, NiSource Inc., Bay State's parent company, has
2 merged with Columbia Energy Group. Except for the level of detail that "fine
3 tunes" the way the Company determines usage by rate block, the methodologies
4 used in this case are basically identical to what was used by the Company in the
5 past. In addition, the NiSource local distribution companies are attempting to
6 employ consistent methodologies wherever appropriate and practical. In the
7 instance of billing determinants, the proposed method provides a more detailed
8 customer-by-customer determination, which proves to be highly accurate. The
9 proposed method is currently being implemented by all of the other NiSource
10 local distribution companies for both internal and external purposes. Specifically
11 the proposed methodologies have been accepted in each of the most recent
12 general rate cases for Columbia Gas of Kentucky (case no. 2002-00145),
13 Columbia Gas of Ohio (case no. 94-987-GA-AIR), Columbia Gas of Maryland
14 (case no. 8771), Columbia Gas of Pennsylvania (case no. R-00943001), Columbia
15 Gas of Virginia (case no. PUE980287), and Northern Utilities – New Hampshire
16 Division (case no. DG 01-182).

17
18 Q. Please explain how the Company achieved Step (1) of extracting the monthly
19 customer gas use for the twelve months, January 2004 through December 2004.

20 A. Using CIS, Bay State is able to extract each customer's invoiced monthly gas use
21 for the test year. As stated previously, the billing adjustments for prior months

1 that occurred during the test year were mechanically identified. Once identified,
2 the adjustments were mechanically eliminated from the month in which they were
3 invoiced and assigned to previous months until the adjustment was fully
4 accounted for. In the case that the adjustment was for a month prior to the test
5 year, the adjustment was eliminated from the test year. As a result of this
6 procedure, and considering that most of the billing history reflects actual metered
7 gas consumption for every month, the results show the best representation of the
8 gas consumption of Bay State's customers. Having each customer's monthly gas
9 use profile essentially represents the "physical flow" of gas for each month in its
10 test year, January 2004 through December 2004.

11
12 Q. Please explain Step (2) once you captured the monthly physical flow of
13 customers' gas use.

14 A. Because the physical flow of gas is extracted from CIS, gas volumes represent the
15 gas use by billing cycle. Thus, the next step is to convert the billing month gas
16 volumes to a calendar month basis.

17
18 Q Why are calendar month volumes and not billing month volumes used as a basis
19 for calculating the Company's revenue requirement and developing its rate
20 design?

1 A. The Department has found that this conversion is best for ratemaking purposes.
2 In particular, volumes that are both shown on the customer's bill or invoice and
3 recorded on the Company's books apply to both the previous and current calendar
4 month. It is especially important to capture the most representative monthly
5 physical flow volumes in the billing months that cross-seasonal rate changes (i.e.,
6 April to May and October to November) and for the first (January 2004) and last
7 (December 2004) months of the test year. Further, restating each month of the
8 test year on a calendar month basis should result in more representative
9 cumulative billing determinants, which are used to determine the Company's
10 revenue requirements and rate design.

11

12 Q. Please continue.

13 A. Billing month volumes recorded on the Company's financial statements represent
14 the volumes billed on the customer's current month invoice based on the
15 customer's billing cycle, including any adjustments (canceled and re-bills) to
16 prior months invoices corrected on the current month's invoice. However, billed
17 physical flow volumes, which are recorded in the billing cycle month in which the
18 gas flows are split between the calendar months to create calendar based physical
19 flow volumes. These volumes are then reduced by $\frac{3}{4}$ of a February day's usage to

1 reflect 365 $\frac{1}{4}$ days of usage in the test year.¹ The final adjusted physical flow
2 volumes are shown in Column 1 of Schedule JAF-1-5.

3

4 Please note that although the AMR metering devices have minimized billing
5 adjustments, total calendar based volumes in Column 1 do not match the sum of
6 billed and unbilled volumes shown on the financial statements, because of the
7 relatively small number of billing adjustments.

8

9 Q. Please now explain Step (3) of the process, which is the conversion from billing
10 month usage volumes to calendar month usage volumes.

11 A. The conversion from billing month volumes to calendar month volumes is
12 performed on the six groups previously identified as Step (2). Using each
13 division's base load and use per Effective Degree Day ("EDD") factors, the
14 portion of billing cycle gas use for days prior to the calendar month but billed in
15 the current billing cycle month is subtracted from the current month, while the
16 portion of gas use for days during the current month but billed in the next month's
17 billing cycle is added to the current calendar month.

18

19 The calculation steps for each of the "heat" categories (Residential Heat and all
20 the C&I High Peak Period rate classes, G/T 40, 41, 42 and 43) are as follows:

¹ Please see Section IV, below, entitled "Further Development and Additional Adjustments to Test Year Billing Determinants," for a discussion of why the Company made this adjustment to volumes.

- 1 • Monthly base load volumes = Annual base load allocated by the number
2 of days in the calendar month.
3

- 4 • Heating volumes = Total billed physical flow volumes for the month –
5 Monthly base load volumes.
6
- 7 • Usage / EDD = Heating volumes / total EDDs for the billing cycle.

- 8 • Prior Month Heating Usage = Usage / EDD * # EDDs in cycle before the
9 1st of the month.
10
- 11 • Unbilled Current Month Usage = Usage / EDD * # EDDs in the current
12 month after the last day of the cycle.
13
- 14 • Current Month Heating Usage = Total heating usage – prior month
15 heating usage + unbilled current month heating usage.
16

17 For example, calendar month April equals billing cycle April gas use on and after
18 April 1st, plus billing cycle May gas use on or before April 30th. Using the month
19 of April for the Residential Heating class in the Brockton Division to illustrate,
20 please refer to Page 1, Sheet 1 and 2.

21 First, the net unbilled for the temperature, or heat, sensitive (“TS”) therms
22 is calculated as follows:

- 23 • TS current month unbilled therms (Column 15c) = April unbilled
24 EDD of 207 times May TS therms per EDD of 10,868 (Column
25 15) = 2,249,760 therms
26

- 27 • TS previous month unbilled therms (Column 15d) = March
28 unbilled EDD of 489 (Column 15b) times April TS therms per
29 EDD of 15,633 (Column 15) = 7,644,365
30

31 Then, the Actual Calendar Month therms is calculated as follows:

- Difference of previous and current month unbilled TS therms of a negative -5,394,605 therms (Column 16) is added to the total April Billing month therms of 15,501,967 (Column 1, Sheet 1) to equal Actual Calendar Month therms of 10,070,278 (Column 17).

The “non-heat” categories (Residential Non-heat and all the C&I Low Peak Period rate classes, G/T 50, 51, 52 and 53) use the same base load procedure as the “heat” categories, but the annual volume in excess of base load is termed “seasonal” and is allocated by normal calendar month EDDs.

Once calendar based physical flow volumes are adjusted by the February $\frac{3}{4}$ day’s usage and are determined by division, by customer class, by month, volumes are allocated to each customer within that division and customer class, by calendar month based on applying to each customer’s billed physical flow volumes the ratio of the total calendar based physical flow volumes to total billed physical flow volumes.

Q. Finally, please explain Step (6), which is how the calendar month based volumes in Column 1, Schedule JAF-1-4 were split by rate block?

A. A bill frequency analysis was performed for each Rate Schedule for each month of the test year by accumulating calendar volumes, on a customer-by-customer basis, at 45 usage levels including those levels that coincide with the rate blocks of the pertinent Rate Schedule.

1 **V. TEST YEAR WEATHER NORMALIZATION ADJUSTMENT**

2 Q. Mr. Ferro, as you indicated in Step (4) above, the Company weather normalizes
3 the actual calendar month physical flow volumes. First, please explain what is
4 meant by weather normalization and what is the purpose of weather normalizing
5 test year volumes and revenues?

6 A. In New England, and in other parts of the country as well, a large portion of
7 natural gas sales is used to heat homes, offices and other buildings, while a
8 smaller portion of sales is used for non-space heating purposes such as cooking,
9 water heating and clothes drying. Thus, gas sales can be divided into two
10 categories: non-heating sales, which are not sensitive to the temperature, and
11 heating sales, which correlate strongly with temperature and accompanying wind.
12 Because of the large portion of temperature sensitive sales, the colder and windier
13 the weather conditions are, the more sales a gas company will make. Conversely,
14 the warmer and calmer the weather conditions are, the less sales a gas company
15 will make.

16
17 The purpose of weather normalization is to reflect the weather conditions that are
18 likely to occur during the first year after the new rates go into effect (the rate
19 year). Statistically, temperatures and wind speed during the rate year are expected
20 to be average or normal. Weather normalization adjusts the test year sales
21 volumes and revenues to the level that would have been experienced had weather
22 been normal. Unless actual test year billing determinants and revenues are

1 adjusted to reflect normal weather conditions, the test year revenue deficiency
2 will be distorted and rates will be incorrectly established.

3

4 Q. Was the weather warmer or colder than normal during the test year?

5 A. The calendar month test year weather was 285 effective degree days (EDD) or 4.4
6 percent colder than normal in the Company's Brockton Division service territory,
7 195 EDD or 3.0 percent colder than normal in its Springfield Division service
8 territory and 318 EDD or 4.6 percent colder than normal in its Lawrence Division
9 service territory. Schedule JAF-1-6, page 6 (Brockton), page 7 (Lawrence), and
10 page 8 (Springfield) presents the 20-year EDD history by calendar month, the
11 average of that history to derive normal, and the comparison of the 2004 actual
12 EDD with normal. Pages 6 (a), 7 (a) and 8 (a) present the billing month version
13 of the same data and determinations of normal and variations from normal, for the
14 Brockton, Lawrence and Springfield service territories, respectively.

15

16 Q. What was the weather normalization impact on the Company's test year volumes?

17 A. As shown on Schedule JAF-1-6, pages 1-3, and summarized on page 4, the
18 Company's weather normalized volumes were colder-than-normal by:

| | | |
|----|------------------------|------------------------|
| 19 | Brockton Div. - | 7,839,803 MMBtu |
| 20 | Springfield Div. - | 2,492,826 MMBtu |
| 21 | <u>Lawrence Div. -</u> | <u>3,660,880 MMBtu</u> |
| 22 | Total | 13,993,508 MMBtu |

1

2 Q. What impact did the colder-than-normal volumes have on the Company's test
3 year revenues?

4 A. The weather normalization impact on revenues is the difference between the
5 actual test year volumes and weather-normalized volumes applied to the current
6 base rates. Page 10 of Schedule JAF-1-5 shows that the difference in actual and
7 normalized total firm throughput revenues is \$(2,555,582). Pages 1-9 of this
8 schedule show the weather normalized revenue differences by rate class.

9

10 Q. How are the results of your weather normalization analysis reflected in the
11 Company's determination of its revenue deficiency?

12 A. As shown on Exhibit BSG/JES, Schedule JES-1, Mr. Skirtich has used the
13 weather normalized test year operation revenue of \$481,909,253, which reflects
14 the reduction in actual test year revenues due to weather normalization by the
15 non-gas revenue adjustment of \$(2,555,582).

16

17 Q. Have you prepared a schedule to support your weather normalization adjustment?

18 A. Yes. First, the weather normalized volume and revenue adjustment by rate class
19 is summarized for the year in Schedule JAF-1-5. As previously referenced, the
20 detailed support of the calculations of the weather-normalized adjustment to
21 volumes is presented in Schedule JAF-1-6. Schedule JAF-1-6 presents the

1 calculation of converting physical flow billing month volumes to calendar month
2 normalized volumes by rate class, by month, for the Company's three service
3 territories.

4 Schedule JAF-1-6 includes 2 pages for each division, with each page
5 containing 3 customer class groups, while each page has 3 sheets sectioned by the
6 Columns and stage of the calculation noted above. Page 1 includes the
7 Residential Heating; Residential Non-heating; and C&I, High Peak Period, Low
8 and Medium Annual Use (G/T 40 and 41). Page 2 includes C&I Low Peak
9 Period, Low and Medium Annual Use (G/T 50 & 51); C&I High Peak Period,
10 High and Extra Large Annual Use (G/T 42 and 43); and C&I Low Peak Period,
11 High and Extra Large Annual Use (G/T 52 and 53).

12 Columns 1 through 11 of Schedule JAF-1-6 show the billing month
13 weather normalization calculation (Sheet 1);
14

15 Columns 12 through 21 of Schedule JAF-1-6 include the calculation of the
16 unbilled volumes and determination of calendar month volumes, by temperature-
17 sensitive and base use per customer (Sheet 2);
18

19 Columns 22 through 31 of Schedule JAF-1-6 continue the calculation of
20 weather normalizing calendar month volumes, as well as including the billing day
21 adjustment for the 29 days in February 2004 (Sheet 3).
22

23 Q. Please summarize the methodology that the Company uses to weather normalize
24 sales volumes and transportation throughput.

25 A. The Company determines weather normalizing volume adjustments to firm sales
26 volumes and transportation throughput for each of the temperature-sensitive rate

1 classes, Residential Heating and C&I High Peak Period classes (G/T-40, 41, 42 &
2 43), by identifying the temperature-sensitive portion of volumes for these rate
3 classes and calculating how much more or less the monthly volumes would have
4 been to that rate class if temperatures had been normal.

5
6 Q. Why did you choose not to weather normalize the C&I Low Peak Period rate
7 classes?

8 A. By rate class definition these rate classes use less than 70% of annual use in the
9 peak period. Such a load characteristic, by itself, is not enough to conclude that a
10 class is not temperature or heat sensitive, but rather is just an indicator that much
11 of the load is likely unaffected by weather. However, in at least one instance,
12 each of these classes showed greater use in either July or August than in other
13 months, or indicated some other counter temperature sensitive or logically
14 inconsistent results. These logical inconsistencies were as follows:

15 Lawrence Division

16 Rate 50 – May was the maximum use month

17 Rates 51 and 52 – No temperature sensitive volume in October

18 Rate 53 – No temperature sensitive volume in October through
19 December

20
21 Brockton Division

22 Rate 50 – No temperature sensitive volume in Oct; March greater
23 than January
24

1 Rates 51, 52 and 53 – No temperature sensitive volume in October

2 Springfield Division

3 Rate 51 – No temperature sensitive volume in October

4 Rate 52 – No temperature sensitive volume in May

5 Rate 53 – No temperature sensitive volume in January, March and
6 October
7

8 In addition and more to the point, applying the weather normalization routine to
9 these classes did not yield a material impact on the test year billing determinants
10 and associated revenues. The weather normalization routine generated a weather
11 normalization adjustment that reduced test year volumes by only about 0.1%. For
12 these reasons of logical inconsistencies and immateriality, the Company chose not
13 to weather normalize the Residential Non-heating class and the Low Peak Period
14 C&I classes.

15

16 Q. Please describe the procedure used to weather normalize the Company's test year
17 volumes.

18 A. The procedure, which is shown in Schedule JAF-1-6, pages 1-3, requires four
19 monthly data elements: (1) Volume in Therms, (2) Customer Count, (3) Actual
20 EDD and (4) Normal EDD. As shown on this schedule, the actual calendar
21 month physical flow volumes are calculated in Column 17 and number of
22 customers is input in Column 18 and is the same as the billing month number of

1 customers in Column 2. Using this data, and as documented in the schedule, the
2 procedure is as follows:

- 3 1. Monthly Dth/customer = $Dth / Customers$
- 4 2. Base Load Dth/Customer = Average of the two lowest months of
5 Dth/Customer considering the months July-September
- 6
7 3. Temperature-Sensitive Dth/Customer = $Dth/Customer - Base\ Load$
8 $Dth/Customer$
- 9
10 4. Normal Dth/Customer = $Base\ Load\ Dth/Customer + ((Temperature-$
11 $Sensitive\ Dth/Customer) * (Normal\ EDD / Actual\ EDD))$
- 12
13 5. Normal Dth = $Normal\ Dth/Customer * Customers$

14
15 Q. Since the Company performs the weather normalization calculation on the
16 temperature-sensitive rate classes, how does the Company allocate each rate
17 class's weather normalization adjustment to each customer in the respective rate
18 classes?

19 A. Normalized volumes for the temperature-sensitive rate classes (i.e., Residential
20 Heat and the C&I High Winter - G/T40, 41, 42 & 43), are allocated to each
21 customer within each division, by month based on applying to each customer's
22 calendar month physical flow volumes the ratio of the total normalized volumes
23 to total calendar based physical flow volumes.

24
25 Q. Are there any differences in the weather adjustment procedure used in this filing
26 and that presented in the Company's last general rate case?

1 A. Other than having an additional step to allocate the rate class weather
2 normalization adjustment to each customer, the procedure is virtually the same
3 with respect to determining the weather-normalized adjustment to actual volumes
4 by rate class. However, as previously explained, the data that was used in the
5 weather normalization process is much improved. The consumption data for this
6 rate case more accurately represents the physical flow of gas rather than the
7 billing data reflective of estimating meter readings and the routine prior month
8 billing adjustments. Accounting records sometimes contain adjustments to
9 correct prior month errors that can distort the record of consumption in the current
10 month. For this filing, virtually all consumption data used in the bill frequency
11 analysis represents the actual gas use for each month.

12
13 Q. In your earlier discussion on converting billing month to calendar month volumes,
14 you mentioned using customer estimating factors of base load and use per
15 effective degree day. Please explain what is meant by a degree day.

16 A. Degree day data is a standard means of expressing the correlation between
17 temperature and heating requirements. Degree days are typically calculated as the
18 difference between an average temperature for the day and a base temperature of
19 65 degrees Fahrenheit (F.), which is the lowest temperature for which heating
20 load is not required.

21

1 Q. Please define EDD as utilized in your testimony.

2 A. EDD is a means of expressing the correlation between various weather conditions
3 and heating requirements by adjusting heating degree days to factor in wind
4 speed.

5

6 Q. What is your source for EDD?

7 A. Hourly temperatures and wind speeds are provided by Surface Systems, Inc.
8 (SSI), a company that specializes in delivering and forecasting weather data. SSI,
9 which obtains the hourly data from National Weather Service stations in Windsor
10 Locks, CT (Bradley Field), Providence RI, Bedford, MA, and Portsmouth NH,
11 converts this hourly data into effective degree day data for every day of the year.

12

13 Q. Why does SSI provide you with weather data from these four weather stations?

14 A. The Company has 3 distinct service territories, the Brockton, Springfield and
15 Lawrence divisions. To best represent the weather conditions in these service
16 territories SSI has utilized the data from these stations for the Company's
17 purposes as follows:

18 Springfield – Windsor Locks, CT

19 Brockton – Average of Bedford, MA and Providence, RI

20 Lawrence – Average of Bedford, MA and Portsmouth, NH

1 The Company has used degree day data from these stations, in the manner
2 outlined above, for at least as far back as 1992, for its last general rate case,
3 D.P.U. 92-111.

4

5 Q. Please explain why these weather data sources do not come from weather
6 recordings measured in each of the three divisions.

7 A. In order to calculate normal degree days, at least twenty years of accurate,
8 consistent weather records are needed; data meeting these criteria are not
9 available for any sites in the Company service territories. In addition, on a going
10 forward basis, the Company relies on receiving weather data in a timely manner.
11 Timely reporting of weather data is also not available for any sites in the
12 Company service territories.

13

14 Q. How are EDDs calculated?

15 A. In calculating EDDs, the 3 steps below detail for each day the derivation of (1) a
16 representative temperature value; (2) heating degree day from that temperature
17 value; and (3) effective degree day by incorporating wind speed. The EDD are
18 calculated as follows:

- 19 1. Determine the average temperature of the day by averaging
20 twenty-four recorded temperature values.
- 21
- 22 2. Derive the heating degree day (HDD) by subtracting the average
23 temperature from 65 degrees Fahrenheit;
24

1 3. Incorporate wind speed by multiplying the HDD by (1 + wind
2 speed)/100)
3

4 Q. How long has the Company used SSI for its weather data?

5 A. The Company began using SSI for weather data shortly after the merger between
6 NiSource Inc. and Columbia Energy Group (“CEG”) (around November 1, 2000).
7 At that time, the administrative function involving demand forecasting and
8 financial planning, which involves weather normalization services was
9 consolidated as a corporate services function. Because the CEG was using SSI
10 for its weather data needs in all the other Columbia companies, SSI was agreeable
11 to provide the Company with data from these four other weather stations.

12

13 Q. What weather services company was Bay State using prior to using SSI?

14 A. The Company was using Meteorlogix, formerly Weather Services, Inc., for all its
15 weather data needs. Meteorlogix also provided the Company with the data from
16 the same four weather stations. Since the Company was able to get a complete
17 history of weather data from SSI and an uninterrupted timely reporting of weather
18 data, as well as that the weather data was from the same source as the data
19 reported by Meteorlogix, the Company switched to SSI.

20

21 Q. Does this mean that the Company is using different measurements of weather than
22 it used in its last base rate proceeding?

1 A. No. The Company continues to use EDD calculated from temperature and wind
2 speed measured at the same weather stations as used in the past. The calculation
3 of daily EDD and wind speed, however, have been enhanced by using the average
4 of 24 hourly temperatures and wind speed recordings. Previously, Meteorlogix
5 provided the Company with EDD reflecting the average of 10 temperature
6 recordings: the maximum, minimum and temperatures recorded every 3 hours of
7 the 24-hour period (from 7:00 am to 4:00 am). Also, Meteorlogix previously
8 provided the Company with EDD that reflected wind speed as the average of 4
9 recordings taken at 10:00 am, 4:00 pm, 10:00 pm and 4:00 am.

10

11 **VI. ADDITIONAL ADJUSTMENTS TO TEST YEAR BILLING**
12 **DETERMINANTS**
13

14 Q. Mr. Ferro, as part of your discussion above related to Step (2), you introduced the
15 concept of converting billed physical flow volumes to calendar based physical
16 flow volumes, and then reducing these volumes by $\frac{3}{4}$ of a February day's usage to
17 reflect $365 \frac{1}{4}$ days of usage in the test year. What is the purpose of this billing
18 day adjustment?

19 A. The 2004 test year contains 366 days of calendar month billing use. On average,
20 the Company will be billing its customers for 365.25 days a year; for every 4
21 years, 3 years will contain 365 days and one year will have 366 days. Thus, the
22 purpose of the billing day adjustment is to adjust the test year's 366 days of gas

1 use to 365.25 days. However, since the Company's weather normalization
2 routine captures the additional 0.75 days in February, a billing day adjustment is
3 only needed for the Company's base load throughput in the test year.
4

5 Q. Please explain how the Company's weather normalization routine captures the
6 additional 0.75 days in February.

7 A. In determining the difference in actual and normal EDD in February, the
8 Company compares actual EDD throughout the 29 days in February 2004 with the
9 normal or 20-year average EDD in February, which reflects 28 days in three out
10 of every four Februaries and 29 days in one out of every four Februaries, or an
11 average of 28.25 days. Since the weather normalization adjustment accounts for
12 the test year 2004 having 29 days as compared to the "normal" 28.25 days, the
13 Company has adjusted its test year volumes and associated revenues by an
14 amount that assumes February 2004 had 28 calendar days.
15

16 Using the Brockton Division Residential Heating class for illustration, and
17 referring to Schedule JAF-1-6, page 1, in February 2004 the Company
18 experienced temperature-sensitive load per customer of 157.0 therms (Column
19 21). Because total gas use per customer of 179.3 therms (Column 19) was higher
20 than it otherwise would have been if not for the 29 days in February, this
21 temperature-sensitive load was also higher due to the 29 days in February. Off-

1 setting this higher temperature-sensitive gas use is weather normalizing based on
2 actual February 2004 EDD for 29 days of 1040 EDD versus normal EDD for
3 28.25 days of 1059 EDD. If not for the 29 days in February 2004, actual EDDs
4 would have been even lower and the month would have been warmer-than-normal
5 by more than the 19 EDD (Column 28) and resulting 316,887 therms (Column
6 29), resulting in a further increase to test year billing determinants and associated
7 revenue. Thus, the Company does not need an explicit billing day adjustment for
8 the impact that the 0.75 days has on its temperature-sensitive load.

9
10 Q. Please explain how the Company determined the billing day adjustment on the
11 Company's base or non-temperature-sensitive load.

12 A. Referring to Schedule JAF-1-6 and again using the Brockton Division Residential
13 Heating class for illustration on page 1, Sheets 1-3, the Company adjusted its base
14 load use per customer of 23.6 therms (see Column 4) by the ratio of 28.25 days to
15 29 days. The adjustment is derived by multiplying 23.6 therms x 28.25/29 less
16 23.6 by the number of customers of 110,491 (see Column 2), essentially adjusting
17 the February 2004 base load use to 97.4% of the actual base load use. The
18 resulting adjustment of -63,808 Dth is shown in Column 30.

19
20 The Company adjusted the base load use in February for all its weather sensitive
21 and non-weather sensitive classes. Schedule JAF-1-6, Column 4, shows each

1 class' February 2004 base load (or total load for non-weather sensitive classes),
2 and performed the same calculation as described above. Schedule JAF-1-6, in
3 Column 30 (sheet 3) of each division, shows the non-weather-sensitive
4 adjustment. The total adjustment of the three divisions is a reduction to test year
5 volumes of 449,686 therms, and has also been allocated to each customer and
6 then reflected in the calendar month bill frequency. The summary of these
7 volumes, along with the unbilled and weather normalization volumes, are shown
8 on Schedule JAF-1-6, page 4. The resulting revenue difference of the non-
9 weather sensitive billing day adjustment is included in the "adjustment to reflect
10 annualization" on the summary schedule, JAF-1-1.

11
12 Q. Please explain the process that is undertaken to produce the number of bills used
13 to price revenue in this case.

14 A. Calculations made to determine the number of bills are found in Schedule JAF 1-
15 3. The number of bills is accumulated by rate schedule (Service Level
16 Plan/Service Level Plan Option) on a customer-by-customer and month-by-
17 month basis. The criteria used to determine the number of bills are based on
18 either: 1) the customer is active in the month or 2) the customer is inactive but
19 received a final bill in the month. In both instances the month must be in the test
20 year (twelve months ending 12/31/04). The bills are accumulated based on which

1 rate schedule the customer was on in the month gas was consumed. The resulting
2 number of bills by Rate Schedule is recorded in Column 1.

3
4 Adjustments resulting from large commercial or industrial customers either
5 discontinuing or adding service during the test year are subject to materiality and
6 ebb and flow precedent . Since there were no C&I customers who, by leaving or
7 coming onto the system had annual revenue impact of at least one percent (1%) of
8 the Company's distribution revenues, there were no adjustments. Column 2 was
9 set up to capture the impact of customer transfers among rate schedules.

10 However, no adjustments were reflected here, because such activity is considered
11 part of the ebb and flow of test year activity. Test year adjusted number of bills in
12 Column 3 is the sum of Columns 1 and 2. Bills in Column 3 are used for pricing
13 in Schedule JAF 1-2 (pro-forma revenue at current rates).

14
15 Q. Please explain test year adjusted volumes by Rate Schedule shown on Schedule
16 JAF-1-4.

17 A. Test year adjusted volumes shown in Column 4 are the sum of physical flow
18 volumes in Column 1, weather normalized volumes in Column 2 and rate
19 schedule transfers in Column 3. (Again, there were no adjustments associated
20 with volumes of large C&I additions or losses since no such occurrences of
21 materiality, at least 1% of distribution revenues, were identified.) Volumes in

1 Column 4 are used for pricing in Schedule JAF-1-1 (pro-forma revenue at current
2 rates).

3

4 **VII PRO FORMA TEST YEAR REVENUES**

5 Q. How was pro forma revenue at current rates calculated?

6 A. As shown in Schedule JAF-1-2, adjusted test year bills from Schedule JAF-1-3
7 are shown in Column 1 and adjusted test year volumes from Schedule JAF-1-4
8 are shown in Column 2. Current rates are shown in Column 3. Revenue is
9 calculated in Column 4 by multiplying customer charges by number of bills and
10 volumetric rates by volumes. Pro forma revenue at current rates was calculated
11 using rates approved by the Commission in the Company's last base rate
12 proceeding, D.T.E 97-97, effective November 1, 1998.²

13

14 Q. Please explain the Volume and Revenue Summary on Sheet 1 of Schedule JAF-1-
15 1.

16 A. Column 1 shows test year calendar physical flow volumes, unadjusted customer
17 counts, and revenue from the Company's financial statement (i.e., per books).
18 Column 2 shows gas cost expense (i.e., GAF) from the Company's financial
19 statement. Column 3 shows non-recurring accruals booked to revenue and
20 Column 4 shows the Local Distribution Adjustment Factor ("DAF") revenue from

² In D.P.U. 97-97, Bay State entered into a 2-year rate plan, in which base rates were increased for 2 consecutive years by up to \$1.8 million for the revenue requirement associated with system improvement plant.

1 the Company's financial statement. Column 5 shows the Distribution Service
2 Weather Normalization Adjustment and its revenue impact calculated in Schedule
3 JAF-1-5. Column 7 shows the calculated pro forma Distribution Service
4 revenue from Schedule JAF-1-2. Column 8 is the net effect on pro forma revenue
5 as compared to book revenue for annualization adjustments other than direct gas
6 costs, indirect gas costs, and DAF revenues and weather normalization (i.e.,
7 Annualized Delivery Service Revenues.) This adjustment would include, but
8 would not be limited to out of period adjustments, billing day adjustment, and
9 customers switching rate schedules during the test year.

10
11 Q. Please explain Sheet 2 of Schedule JAF-1-1.

12 A. Column 1 shows proforma Distribution Service revenue at current rates (i.e.,
13 Annualized Delivery Service Revenues). Column 1 is carried forward from Sheet
14 1, Column 7, of Schedule JAF-1-1. Column 2 shows a summary of gas costs at
15 current rates excluding pipeline refunds (i.e., Direct GAF @ Current Rates).
16 Column 3 shows a summary of indirect gas costs at current rates (i.e., Indirect
17 GAF @ Current Rates). Column 4 shows a summary of DAF revenues at current
18 rates (i.e., Annualized DAF @ Current Rates). Backup calculations for Columns
19 1, 2, 3, and 4 are shown in Schedule JAF-1-2. Column 5 shows total revenue at
20 current rates used for deriving the revenue requirement and designing rates (i.e.,
21 Annualized Revenue @ Current Rates).

1

2 Q. Mr. Ferro, please explain Schedule JAF-1-2.

3 A. Schedule JAF-1-2 provides Bay State's revenue at current rates based on per
4 books adjusted billing determinants and volumes. To derive these revenues for
5 each customer class, I provide the number of customer Bills in Column 1,
6 Volumes (therms) in Column 2, Rates in Column 3, and Revenues in Column 4.

7

8 Q. Regarding Column 3, what rate components are included in the Gas Adjustment
9 Factor ("GAF") rates presented in Schedule JAF-1-2?

10 A. Direct GAF is made up of gas costs associated with the purchasing of gas supplies
11 and upstream pipeline and underground storage reservation and/or capacity.
12 Indirect GAF is made up of the cost of (1) the revenue requirement of the on-
13 system LNG and propane plants allocated to the Gas Supply function, also
14 referred to as production and storage, (2) working capital associated with gas
15 costs, and (3) bad debt expense associated with gas cost collections. All GAF
16 rates used to develop test year revenues represent the actual rates charged during
17 the test year.

18

19 Q. What rate components are included in the DAF rates presented in Column 3 of
20 Schedule JAF-1-2?

1 A. DAF is an acronym that stands for Local Distribution Adjustment Factor. The
2 DAF is made up of (1) Conservation Charge associated with DSM programs, (2)
3 Remediation Adjustment Charge (RAC) related to Environmental Response
4 Costs, (3) Exogenous Cost Factor, (4) Interruptible Transportation Credit, and (5)
5 Customer Choice expenses. All DAF rates used to develop test year revenues
6 represent the actual rates charged during the test year.

7

8 **VIII. OTHER REVENUE ADJUSTMENTS – FEES FOR SERVICES**

9 Q. What are the Other Revenue Adjustments that the Company made to the test
10 year?

11 A. Because the Company is proposing to change certain fees set out in its Terms and
12 Conditions at M.D.T.E. No. 35, Page Appendix B-1, any increase resulting from
13 changes in such fees and associated revenues is reflected as Other Revenue
14 Adjustments to the test year. The fees that the Company is proposing to change
15 are as follows:

- 16 • Account Reactivation Fee (regular and after business hours)
17 • Meter Test Fee
18 • Warrant Fee

19 The Company is also proposing to include an additional fee to its Terms and
20 Conditions:

- 21 • Locksmith Fee

1

2 Q. Please explain the Company's proposal to increase the Account Reactivation Fee.

3 A. The Company's current Reactivation Fee is \$15.00 and \$20.00 for regular and
4 after business hours (e.g., weekends, holidays and after office closing time). The
5 Company has performed an analysis of the cost of reactivating a customer's
6 account, excluding overhead costs. Schedule JAF-1-7, page 2, presents the
7 analysis and shows that the average cost for reactivating an account is \$22.59 and
8 \$32.55 for regular and after business hours, respectively. Since the Company
9 feels it is not paramount, nor necessarily intended, for such a fee to fully reflect
10 the associated underlying costs, the Company is proposing an increase of \$5.00 to
11 \$20.00 for regular business hours and an increase of \$10.00 to \$30.00 for after
12 business hours. Considering the cost analysis indicates an average cost of
13 approximately \$2.50 higher than the proposed fees, and that the cost analysis does
14 not include overhead costs for tools, supervision, clerical, call center, dispatch, IT,
15 etc.), and finally, that it is not critical for such fees to be fully cost-based, the
16 Company believes the proposed fees are quite reasonable.

17

18 Q. What is the revenue adjustment to the test year associated with the revised
19 Account Reactivation Fees?

20 A. Schedule JAF-1-7, page 1, presents the revenue adjustment of \$34,855. This
21 revenue adjustment represents the difference between the proposed and current

1 fees for both regular and after business hours based on the number of times the
2 Company reactivated accounts in the 2004 test year.

3

4 Q. Please explain the Company's proposal to increase the Meter Test Fee.

5 A. The Company's current Meter Test Fee is \$10.00. The Company performed an
6 analysis of the cost of testing a meter upon a customer's request. Schedule JAF-
7 1-8 presents the analysis and shows that the average cost for testing a meter to be
8 \$67.58. As with the Account Reactivation Fee, since the Company feels it is not
9 paramount, nor necessarily intended, for such a fee to fully reflect the associated
10 underlying costs, the Company is proposing an increase of \$40.00, from \$10.00 to
11 \$50.00. Considering the cost analysis indicates an average cost of \$67.58 and that
12 it is not critical for such fees to be fully cost-based, the proposed fee of \$50.00 is
13 reasonable.

14

15 Q. What is the revenue adjustment to the test year associated with the revised Meter
16 Test Fee?

17 A. Although the Company is proposing to change the meter test rate by \$40.00 to
18 \$50.00, there is no revenue adjustment associated with the proposed Meter Test
19 Fee because there were no meter test charges in the test year, and as such none
20 projected into the rate year.

21

1 Q. Please explain the Company's proposal to change the Warrant Fee.

2 A. The Company's current Warrant Fee is \$35.00. However, warrant fees, which are
3 assessed to the Company when Bay State requires a warrant to enter a customer's
4 residence, vary by county. For instance, in the Brockton and Lawrence Divisions
5 the Sheriff Department charges \$40.00 per warrant served. In the Springfield
6 Division, the Sheriff Department charges \$35.00 per warrant served, but also
7 charges for warrants not served in the event the warrant gets canceled, typically
8 due to the customer contacting the Company. In this case, the Company does not
9 charge the customer.

10
11 For the purpose of charging each customer for Bay State's actual costs associated
12 with acquiring a warrant, the Company is proposing to establish in its tariff a
13 direct pass-through Warrant Fee. Instead of a set fee, the fee language proposed
14 in the tariff is as follows:

15 Actual cost assessed to the Company by the servant authorized by the
16 Court to serve the warrant.
17

18 Q. What is the impact to the Company's test year revenues from this Warrant Fee
19 change?

20 A. The impact to test year revenues is the difference between the actual Warrant Fee
21 revenues in the 2004 test year, which were generated by assessing the \$35.00 fee,
22 and the Company's actual costs for acquiring warrants during the test year.

1 Schedule JAF-1-9, shows the revenue adjustment of \$7,270, which is the
2 difference between the actual Warrant Fee revenues of \$18,270 and the actual
3 costs that under its fee proposal would charge of \$25,540.
4

5 Q. Please explain the Company's proposal to implement a Locksmith Fee.

6 A. The Company incurs costs for locksmith service to gain access to its meters in
7 certain locations. In the test year, the Company incurred locksmith service costs
8 of \$4,485 for a locksmith to allow Company access to 110 locations. Since
9 locksmith fees vary by vendor, and that in some counties a locksmith charges a
10 flat fee for the first stop/house, and then a reduced fee for all other stops, the
11 Company does not incur a specific cost for each locksmith stop. The average cost
12 of receiving this service in 2004 is \$40.77 ($\$4,485 / 110$). The Company is
13 proposing to institute a Locksmith Fee similar to this average cost, rounded to
14 \$40.00, in its tariff.
15

16 Q. What is the revenue adjustment to the test year associated with this new fee?

17 A. The revenue adjustment to the 2004 test year represents the proposed Locksmith
18 Fee of \$40.00 times the 2004 number of services performed by locksmiths of 110,
19 or \$4,400, which is very similar to the actual locksmith costs that were incurred
20 by the Company in the test year of \$4,485. Under the Company's proposal, these
21 costs would be passed on, via the Locksmith Fee, to those customers whose

1 locations were accessed through the use of the locksmith service. Schedule JAF-
2 1-9 also presents the actual locksmith fees incurred by the Company during 2004
3 and the Company's annual revenues at the proposed \$40.00 fee.

4

5 **IX. CONCLUSION**

6 Q. Does this conclude this section of your testimony that addresses test year billing
7 determinants and revenues?

8 A. Yes it does. However, I reserve the right to supplement or amend this testimony
9 depending on information that may arise as the proceeding progresses.

Bay State Gas Company
Volume and Revenue Summary
For the 12 Months Ending December 31, 2004

| Line No. | Acct No. | Description | Per Books | | GAF Per Books | | Non-reoccurring | | DAF Per Books | | Delivery Service Weather Adjustment | | Adjustment To Reflect Annualization | | Annualized Delivery Service Revenue | |
|----------|----------|--|-------------|----|---------------|----|-----------------|-----|---------------|-----------------|-------------------------------------|-----|-------------------------------------|------|-------------------------------------|--|
| | | | (1) | \$ | (2) | \$ | (3) | (4) | (5) | (6=7-1+2+3+4-5) | (7) | (8) | (9) | (10) | | |
| 1 | | REVENUE | | | | | | | | | | | | | | |
| 2 | 480/485 | Residential Sales Revenue | 334,824,296 | | 228,869,221 | | 0 | 0 | 3,421,744 | | (1,714,352) | | (6,908,722) | | 93,910,257 | |
| 3 | 481/485 | Comm./Industrial Sales Revenue | 127,857,611 | | 94,823,251 | | 0 | 0 | 1,342,343 | | (592,832) | | (4,763,088) | | 26,336,097 | |
| 4 | 481/485 | Interruptible Sales Revenue | 2,904,376 | | 0 | | 0 | 0 | 0 | | 0 | | (2,904,376) | | 0 | |
| 5 | | TOTAL TARIFF REVENUES | 465,586,283 | | 323,692,472 | | 0 | 0 | 4,764,087 | | (2,307,184) | | (14,576,186) | | 120,246,354 | |
| 6 | 480/485 | Residential Transportation of Gas | 21,028 | | 0 | | 0 | 0 | 1,117 | | (504) | | 4,636 | | 24,043 | |
| 7 | 481/485 | Comm./Industrial Transportation of Gas | 23,754,251 | | 0 | | 0 | 0 | 1,776,995 | | (247,894) | | (652,622) | | 21,076,740 | |
| 8 | 495 | Off System Sales | 3,874,467 | | 3,874,467 | | 0 | 0 | 0 | | 0 | | 0 | | 0 | |
| 9 | 493 | Gas Property Revenue | 1,513,333 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 1,513,333 | |
| 10 | 488 | Rental Revenue | 6,824,456 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 6,824,456 | |
| 11 | 495 | Guardian Care/Inspections | 7,690,936 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 7,690,936 | |
| 12 | 486 | Lost Net Rev Res HTR | 329,951 | | 0 | | 3,393,642 | 0 | (3,063,681) | | 0 | | 0 | | (10) | |
| 13 | 487 | Late Payment Charges | 685,241 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 685,241 | |
| 14 | 485 | Return Check Charge | 27,736 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 27,736 | |
| 15 | 495.26 | Carrying Costs-PRE tax of RET | (988,819) | | (5,668,863) | | 4,680,043 | 0 | 0 | | 0 | | 0 | | 1 | |
| 16 | 495.27 | Prod & Storage Revenues | 1,044,497 | | (8,152,043) | | 66,908 | 0 | 0 | | 0 | | 0 | | 9,129,632 | |
| 17 | 903 | Customer R&C Shut-off Turn-off | 93,975 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 93,975 | |
| 18 | | TOTAL OTHER OPER. REVENUES | 44,871,052 | | (9,946,439) | | 8,140,593 | 0 | (1,285,569) | | (248,398) | | (647,986) | | 47,066,083 | |
| 19 | | TOTAL REVENUE | 510,457,335 | | 313,746,033 | | 8,140,593 | 0 | 3,478,518 | | (2,555,582) | | (15,224,173) | | 167,312,437 | |
| 20 | | SALES VOLUME (Therms) Phy. Flow | | | | | | | | | | | | | | |
| 21 | | Residential Sales | 262,867,029 | | 0 | | 0 | 0 | 0 | | (8,766,303) | | 0 | | 254,100,726 | |
| 22 | | Commercial/Industrial Sales | 115,302,498 | | 0 | | 0 | 0 | 0 | | (3,454,176) | | 0 | | 111,848,322 | |
| 23 | | Interruptible Sales | 3,925,948 | | 0 | | 0 | 0 | 0 | | 0 | | (3,925,948) | | 0 | |
| 24 | | TOTAL SALES VOLUMES | 382,095,475 | | 0 | | 0 | 0 | 0 | | (12,220,479) | | (3,925,948) | | 365,949,048 | |
| 25 | | TRANSPORTATION VOLUMES (Therms) Phy. Flow | | | | | | | | | | | | | | |
| 26 | | Residential Transportation | 83,870 | | 0 | | 0 | 0 | 0 | | (2,413) | | 0 | | 81,457 | |
| 27 | | Commercial/Industrial Transportation | 245,449,984 | | 0 | | 0 | 0 | 0 | | (1,767,494) | | 0 | | 243,682,490 | |
| 28 | | TOTAL TRANSPORTATION VOLUME | 245,533,854 | | 0 | | 0 | 0 | 0 | | (1,769,907) | | 0 | | 243,763,947 | |
| 29 | | TOTAL THROUGHPUT (Therms) | 627,629,329 | | 0 | | 0 | 0 | 0 | | (13,990,386) | | (3,925,948) | | 609,712,995 | |
| 30 | | NUMBER OF BILLS | | | | | | | | | | | | | | |
| 31 | | Residential Sales | 3,043,100 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 3,043,100 | |
| 32 | | Commercial/Industrial Sales | 290,409 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 290,409 | |
| 33 | | TOTAL SALES SERVICE | 3,333,509 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 3,333,509 | |
| 34 | | Residential Transportation | 499 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 499 | |
| 35 | | Commercial/Industrial Transportation | 38,434 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 38,434 | |
| 36 | | TOTAL TRANSPORTATION SERVICE | 38,933 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 38,933 | |
| 37 | | TOTAL BILLS | 3,372,442 | | 0 | | 0 | 0 | 0 | | 0 | | 0 | | 3,372,442 | |

Bay State Gas Company
Volume and Revenue Summary
For the 12 Months Ending December 31, 2004

| Line No. | Acct No. | Description | Annualized | | | | |
|----------|----------|--|------------------------------|----------------------------|------------------------------|--------------------------------|--|
| | | | Delivery Service Revenue (1) | Direct GAF @Curr Rates (2) | Indirect GAF @Curr Rates (3) | Annualized DAF @Curr Rates (4) | Annualized Revenue @Curr Rates (5=1+2+3+4) |
| | | | \$ (Sch JAF1-1) | \$ (Sch JAF1-2) | \$ (Sch JAF1-2) | \$ (Sch JAF1-2) | \$ (Sch JAF1-2) |
| 1 | | REVENUE | | | | | |
| 2 | 480/485 | Residential Sales Revenue | 93,910,257 | 216,689,229 | 13,573,678 | 3,537,586 | 327,710,750 |
| 3 | 481/485 | Comm /Industrial Sales Revenue | 26,336,097 | 90,789,422 | 5,555,933 | 1,524,021 | 124,205,473 |
| 4 | 481/485 | Interruptible Sales Revenue | 0 | 0 | 0 | 0 | 0 |
| 5 | | TOTAL TARIFF REVENUES | 120,246,354 | 307,478,651 | 19,129,611 | 5,061,607 | 451,916,223 |
| 6 | 480/485 | Residential Transportation of Gas | 24,043 | 0 | 0 | 1,152 | 25,195 |
| 7 | 481/485 | Comm/Industrial Transportation of Gas | 21,076,740 | 0 | 0 | 1,900,103 | 22,976,843 |
| 8 | 495 | Off System Sales | 0 | 0 | 0 | 0 | 0 |
| 9 | 493 | Gas Property Revenue | 1,513,333 | 0 | 0 | 0 | 1,513,333 |
| 10 | 488 | Rental Revenue | 6,824,456 | 0 | 0 | 0 | 6,824,456 |
| 11 | 495 | Guardian Care/Inspections | 7,690,936 | 0 | 0 | 0 | 7,690,936 |
| 12 | 486 | Lost Net Rev Res HTR | (10) | 0 | 0 | 0 | (10) |
| 13 | 487 | Late Payment Charges | 685,241 | 0 | 0 | 0 | 685,241 |
| 14 | 485 | Return Check Charge | 27,736 | 0 | 0 | 0 | 27,736 |
| 15 | 495.26 | Carrying Costs-PRE tax of RET | 1 | 0 | 0 | 0 | 1 |
| 16 | 495.27 | Prod & Storage Revenues | 9,129,632 | 0 | 0 | 0 | 9,129,632 |
| 17 | 903 | Customer R&C Shut-off Turn-off | 93,975 | 0 | 0 | 0 | 93,975 |
| 18 | | TOTAL OTHER OPER. REVENUES | 47,066,083 | 0 | 0 | 1,901,255 | 48,967,338 |
| 19 | | TOTAL REVENUE | 167,312,437 | 307,478,651 | 19,129,611 | 6,962,862 | 500,863,561 |
| 20 | | Elimination of Indirect GAF and DAF | | | | | |
| 21 | | For Revenue Requirement | 0 | 0 | (19,129,611) | (6,962,862) | (26,092,473) |
| 22 | | Add back Bad Debt Expense included in | | | | | |
| 23 | | Indirect Gas Cost 1/ | 0 | 0 | 7,118,165 | 0 | 7,118,165 |
| 24 | | Net Revenue for Revenue Requirement | 167,312,437 | 307,478,651 | 7,118,165 | 0 | 481,909,253 |

1/ See worksheet.

Bay State Gas Company
Revenue @ Current Rates Based on Per Books Adjusted Bills and Volumes
For the 12 Months Ending December 31, 2004

| No. | Description | Bills (1) | Volumes (2) Therms | Rates (3) \$/Therm | Revenue (4) \$ |
|-----|---|--------------|--------------------------|--------------------------|----------------------|
| | | (Sch JAF1-3) | (Sch JAF1-4) | | |
| 1 | RESIDENTIAL SALES | | | | |
| 2 | Rate R-1 Residential Non-Heating Bi-Monthly | | | | |
| 3 | Winter Customer Charge | 12,995 | | 14.92 | 193,885 |
| 4 | Summer Customer Charge | 9,596 | | 14.92 | 143,172 |
| 5 | Winter Commodity Charge: | | | | |
| 6 | First 25 Therms | | 278,013 | 0.4349 | 120,908 |
| 7 | Over 25 Therms | | 284,524 | 0.3758 | 106,924 |
| 8 | Summer Commodity Charge: | | | | |
| 9 | First 20 Therms | | 169,042 | 0.3848 | 65,047 |
| 10 | Over 20 Therms | | <u>148,468</u> | 0.2965 | <u>44,021</u> |
| 11 | Total Base Revenue | 22,591 | <u>880,047</u> | | 673,957 |
| 12 | Winter Direct Gas Adjustment Factor (GAF) | | 562,537 | 0.7645 | 430,067 |
| 13 | Summer Direct Gas Adjustment Factor (GAF) | | 317,510 | 0.7711 | 244,829 |
| 14 | Winter Indirect Gas Adjustment Factor (GAF) | | 562,537 | 0.0347 | 19,537 |
| 15 | Summer Indirect Gas Adjustment Factor (GAF) | | 317,510 | 0.0578 | 18,353 |
| 16 | Winter Distribution Adjustment Factor (DAF) | | 562,537 | 0.0022 | 1,226 |
| 17 | Summer Distribution Adjustment Factor (DAF) | | 317,510 | 0.0124 | <u>3,937</u> |
| 18 | Total Revenue | | | | 1,391,906 |
| 19 | Rate R-1 Residential Non-Heating | | | | |
| 20 | Winter Customer Charge | 158,423 | | 7.46 | 1,181,836 |
| 21 | Summer Customer Charge | 176,837 | | 7.46 | 1,319,204 |
| 22 | Winter Commodity Charge: | | | | |
| 23 | First 12 Therms | | 1,326,147 | 0.4349 | 576,741 |
| 24 | Over 12 Therms | | 1,571,861 | 0.3758 | 590,705 |
| 25 | Summer Commodity Charge: | | | | |
| 26 | First 10 Therms | | 1,220,111 | 0.3848 | 469,499 |
| 27 | Over 10 Therms | | <u>930,363</u> | 0.2965 | <u>275,853</u> |
| 28 | Total Base Revenue | 335,260 | <u>5,048,482</u> | | 4,413,838 |
| 29 | Winter Direct Gas Adjustment Factor (GAF) | | 2,898,008 | 0.7951 | 2,304,083 |
| 30 | Summer Direct Gas Adjustment Factor (GAF) | | 2,150,474 | 0.7887 | 1,696,176 |
| 31 | Winter Indirect Gas Adjustment Factor (GAF) | | 2,898,008 | 0.0380 | 110,262 |
| 32 | Summer Indirect Gas Adjustment Factor (GAF) | | 2,150,474 | 0.0578 | 124,297 |
| 33 | Winter Distribution Adjustment Factor (DAF) | | 2,898,008 | 0.0062 | 17,865 |
| 34 | Summer Distribution Adjustment Factor (DAF) | | 2,150,474 | 0.0124 | <u>26,665</u> |
| 35 | Total Revenue | | | | 8,693,186 |
| 36 | Rate R-2 Residential Non-Heating - Bi Monthly Low Income | | | | |
| 37 | Winter Customer Charge | 493 | | 11.94 | 5,886 |
| 38 | Summer Customer Charge | 470 | | 11.94 | 5,612 |
| 39 | Winter Commodity Charge: | | | | |
| 40 | First 25 Therms | | 11,776 | 0.2869 | 3,379 |
| 41 | Over 25 Therms | | 20,228 | 0.2396 | 4,847 |
| 42 | Summer Commodity Charge: | | | | |
| 43 | First 20 Therms | | 8,355 | 0.2517 | 2,103 |
| 44 | Over 20 Therms | | <u>10,993</u> | 0.1811 | <u>1,991</u> |
| 45 | Total Base Revenue | 963 | <u>51,352</u> | | 23,818 |
| 46 | Winter Direct Gas Adjustment Factor (GAF) | | 32,004 | 0.7708 | 24,668 |
| 47 | Summer Direct Gas Adjustment Factor (GAF) | | 19,348 | 0.7767 | 15,027 |
| 48 | Winter Indirect Gas Adjustment Factor (GAF) | | 32,004 | 0.0353 | 1,130 |
| 49 | Summer Indirect Gas Adjustment Factor (GAF) | | 19,348 | 0.0578 | 1,118 |
| 50 | Winter Distribution Adjustment Factor (DAF) | | 32,004 | 0.0029 | 94 |
| 51 | Summer Distribution Adjustment Factor (DAF) | | 19,348 | 0.0124 | 239 |
| 52 | Total Revenue | | | | 66,094 |

Bay State Gas Company
Revenue @ Current Rates Based on Per Books Adjusted Bills and Volumes
For the 12 Months Ending December 31, 2004

| No. | Description | Bills (1) (Sch JAF1-3) | Volumes (2) Therms (Sch JAF1-4) | Base Rate (3) \$/Therm | Revenue (4) \$ |
|-----|---|------------------------------|--|------------------------------|----------------------|
| 1 | Rate R-2 Residential Non-Heat - Low Income | | | | |
| 2 | Winter Customer Charge | 9,325 | | 5.97 | 55,670 |
| 3 | Summer Customer Charge | 8,763 | | 5.97 | 52,315 |
| 4 | Winter Commodity Charge: | | | | |
| 5 | First 12 Therms | | 71,627 | 0.2869 | 20,550 |
| 6 | Over 12 Therms | | 177,038 | 0.2396 | 42,418 |
| 7 | Summer Commodity Charge: | | | | |
| 8 | First 10 Therms | | 67,300 | 0.2517 | 16,939 |
| 9 | Over 10 Therms | | <u>98,412</u> | 0.1811 | <u>17,822</u> |
| 10 | Total Base Revenue | 18,088 | 414,377 | | 205,714 |
| 11 | Winter Direct Gas Adjustment Factor (GAF) | | 248,665 | 0.7866 | 195,596 |
| 12 | Summer Direct Gas Adjustment Factor (GAF) | | 165,712 | 0.7687 | 127,381 |
| 13 | Winter Indirect Gas Adjustment Factor (GAF) | | 248,665 | 0.0370 | 9,211 |
| 14 | Summer Indirect Gas Adjustment Factor (GAF) | | 165,712 | 0.0578 | 9,578 |
| 15 | Winter Distribution Adjustment Factor (DAF) | | 248,665 | 0.0050 | 1,233 |
| 16 | Summer Distribution Adjustment Factor (DAF) | | 165,712 | 0.0124 | <u>2,055</u> |
| 17 | Total Revenue | | | | 550,768 |
| 18 | Rate R-3 Residential Heating | | | | |
| 19 | Winter Customer Charge | 1,227,579 | | 7.47 | 9,170,015 |
| 20 | Summer Customer Charge | 1,222,254 | | 7.47 | 9,130,237 |
| 21 | Winter Commodity Charge: | | | | |
| 22 | First 90 Therms | | 98,497,478 | 0.4000 | 39,398,991 |
| 23 | Over 90 Therms | | 86,404,748 | 0.2076 | 17,937,626 |
| 24 | Summer Commodity Charge: | | | | |
| 25 | First 30 Therms | | 27,899,767 | 0.2317 | 6,464,376 |
| 26 | Over 30 Therms | | <u>13,758,545</u> | 0.1639 | <u>2,255,026</u> |
| 27 | Total Base Revenue | 2,449,833 | 226,560,538 | | 84,356,271 |
| 28 | Winter Direct Gas Adjustment Factor (GAF) | | 184,902,226 | 0.8651 | 159,967,958 |
| 29 | Summer Direct Gas Adjustment Factor (GAF) | | 41,658,312 | 0.8122 | 33,832,934 |
| 30 | Winter Indirect Gas Adjustment Factor (GAF) | | 184,902,226 | 0.0528 | 9,770,054 |
| 31 | Summer Indirect Gas Adjustment Factor (GAF) | | 41,658,312 | 0.0573 | 2,387,022 |
| 32 | Winter Distribution Adjustment Factor (DAF) | | 184,902,226 | 0.0138 | 2,542,447 |
| 33 | Summer Distribution Adjustment Factor (DAF) | | 41,658,312 | 0.0156 | <u>649,870</u> |
| 34 | Total Revenue | | | | 293,506,556 |
| 35 | Rate R-4 Residential Heating - Low Income | | | | |
| 36 | Winter Customer Charge | 113,631 | | 5.97 | 678,377 |
| 37 | Summer Customer Charge | 102,590 | | 5.97 | 612,462 |
| 38 | Winter Commodity Charge: | | | | |
| 39 | First 90 Therms | | 8,576,648 | 0.2247 | 1,927,173 |
| 40 | Over 90 Therms | | 8,401,350 | 0.0709 | 595,656 |
| 41 | Summer Commodity Charge: | | | | |
| 42 | First 30 Therms | | 2,411,584 | 0.1243 | 299,760 |
| 43 | Over 30 Therms | | <u>1,753,620</u> | 0.0700 | <u>122,753</u> |
| 44 | Total Base Revenue | 216,221 | 21,143,202 | | 4,236,181 |
| 45 | Winter Direct Gas Adjustment Factor (GAF) | | 16,977,998 | 0.8572 | 14,552,764 |
| 46 | Summer Direct Gas Adjustment Factor (GAF) | | 4,165,204 | 0.7912 | 3,295,680 |
| 47 | Winter Indirect Gas Adjustment Factor (GAF) | | 16,977,998 | 0.0521 | 884,324 |
| 48 | Summer Indirect Gas Adjustment Factor (GAF) | | 4,165,204 | 0.0573 | 238,667 |
| 49 | Winter Distribution Adjustment Factor (DAF) | | 16,977,998 | 0.0134 | 226,970 |
| 50 | Summer Distribution Adjustment Factor (DAF) | | 4,165,204 | 0.0156 | <u>64,977</u> |
| 51 | Total Revenue | | | | 23,499,563 |

Bay State Gas Company
Revenue @ Current Rates Based on Per Books Adjusted Bills and Volumes
For the 12 Months Ending December 31, 2004

| No. | Description | Bills (1) | Volumes (2) | Base Rate (3) | Revenue (4) |
|-----|--|--------------|------------------------|------------------|----------------|
| | | (Sch JAF1-3) | Therms (Sch JAF1-4) | \$/Therm | \$ |
| 1 | Rate L-60 Outdoor Lighting | | | | |
| 2 | Winter Customer Charge | 72 | | 3.32 | 239 |
| 3 | Summer Customer Charge | 72 | | 3.32 | 239 |
| 4 | Winter Commodity Charge: | | | | |
| 5 | 19 Therms | | 1,395 | 0.0000 | 0 |
| 6 | Summer Commodity Charge: | | | | |
| 7 | 19 Therms | | <u>1,333</u> | 0.0000 | <u>0</u> |
| 8 | Total Base Revenue | 144 | 2,728 | | 478 |
| 9 | Winter Direct Gas Adjustment Factor (GAF) | | 1,395 | 0.7498 | 1,046 |
| 10 | Summer Direct Gas Adjustment Factor (GAF) | | 1,333 | 0.7652 | 1,020 |
| 11 | Winter Indirect Gas Adjustment Factor (GAF) | | 1,395 | 0.0330 | 46 |
| 12 | Summer Indirect Gas Adjustment Factor (GAF) | | 1,333 | 0.0593 | 79 |
| 13 | Winter Distribution Adjustment Factor (DAF) | | 1,395 | 0.0014 | 2 |
| 14 | Summer Distribution Adjustment Factor (DAF) | | 1,333 | 0.0045 | <u>6</u> |
| 15 | Total Revenue | | | | 2,677 |
| 16 | COMMERCIAL & INDUSTRIAL (C&I) SALES | | | | |
| 17 | Rate G-40 C&I Low Annual / High Winter | | | | |
| 18 | Winter Customer Charge | 96,712 | | 12.61 | 1,219,538 |
| 19 | Summer Customer Charge | 94,191 | | 12.61 | 1,187,749 |
| 20 | Winter Commodity Charge: | | | | |
| 21 | First 125 Therms | | 8,836,019 | 0.3694 | 3,264,025 |
| 22 | Over 125 Therms | | 12,040,801 | 0.2315 | 2,787,445 |
| 23 | Summer Commodity Charge: | | | | |
| 24 | First 35 Therms | | 1,131,629 | 0.3288 | 372,080 |
| 25 | Over 35 Therms | | <u>1,302,761</u> | 0.1855 | <u>241,662</u> |
| 26 | Total Base Revenue | 190,903 | 23,311,210 | | 9,072,499 |
| 27 | Winter Direct Gas Adjustment Factor (GAF) | | 20,876,820 | 0.8644 | 18,045,768 |
| 28 | Summer Direct Gas Adjustment Factor (GAF) | | 2,434,390 | 0.8513 | 2,072,310 |
| 29 | Winter Indirect Gas Adjustment Factor (GAF) | | 20,876,820 | 0.0499 | 1,042,083 |
| 30 | Summer Indirect Gas Adjustment Factor (GAF) | | 2,434,390 | 0.0560 | 136,326 |
| 31 | Winter Distribution Adjustment Factor (DAF) | | 20,876,820 | 0.0118 | 245,695 |
| 32 | Summer Distribution Adjustment Factor (DAF) | | 2,434,390 | 0.0204 | <u>49,662</u> |
| 33 | Total Revenue | | | | 30,664,343 |
| 34 | Rate G-50 C&I Low Annual / Low Winter | | | | |
| 35 | Winter Customer Charge | 18,101 | | 12.61 | 228,254 |
| 36 | Summer Customer Charge | 17,746 | | 12.61 | 223,777 |
| 37 | Winter Commodity Charge: | | | | |
| 38 | First 125 Therms | | 1,240,429 | 0.3597 | 446,182 |
| 39 | Over 125 Therms | | 1,371,743 | 0.2268 | 311,111 |
| 40 | Summer Commodity Charge: | | | | |
| 41 | First 80 Therms | | 736,181 | 0.3240 | 238,523 |
| 42 | Over 80 Therms | | <u>1,097,851</u> | 0.1884 | <u>206,835</u> |
| 43 | Total Base Revenue | 35,847 | 4,446,204 | | 1,654,682 |
| 44 | Winter Direct Gas Adjustment Factor (GAF) | | 2,612,172 | 0.7953 | 2,077,451 |
| 45 | Summer Direct Gas Adjustment Factor (GAF) | | 1,834,032 | 0.7777 | 1,426,365 |
| 46 | Winter Indirect Gas Adjustment Factor (GAF) | | 2,612,172 | 0.0457 | 119,382 |
| 47 | Summer Indirect Gas Adjustment Factor (GAF) | | 1,834,032 | 0.0582 | 106,741 |
| 48 | Winter Distribution Adjustment Factor (DAF) | | 2,612,172 | 0.0121 | 31,540 |
| 49 | Summer Distribution Adjustment Factor (DAF) | | 1,834,032 | 0.0204 | 37,414 |
| 50 | Total Revenue | | | | 5,453,575 |

Bay State Gas Company
Revenue @ Current Rates Based on Per Books Adjusted Bills and Volumes
For the 12 Months Ending December 31, 2004

| <u>No.</u> | <u>Description</u> | <u>Bills</u> (1) (Sch JAF1-3) | <u>Volumes</u> (2) Therms (Sch JAF1-4) | <u>Base Rate</u> (3) \$/Therm | <u>Revenue</u> (4) \$ |
|------------|--|-------------------------------------|---|-------------------------------------|-----------------------------|
| 1 | Rate G-41 C&I Medium Annual / High Winter | | | | |
| 2 | Winter Customer Charge | 21,670 | | 45.04 | 976,017 |
| 3 | Summer Customer Charge | 22,156 | | 45.04 | 997,906 |
| 4 | Winter Commodity Charge: | | | | |
| 5 | First 1,000 Therms | | 17,789,142 | 0.1979 | 3,520,471 |
| 6 | Over 1,000 Therms | | 15,722,941 | 0.1572 | 2,471,646 |
| 7 | Summer Commodity Charge: | | | | |
| 8 | First 300 Therms | | 2,742,440 | 0.1246 | 341,708 |
| 9 | Over 300 Therms | | <u>2,381,956</u> | 0.0988 | <u>235,337</u> |
| 10 | Total Base Revenue | 43,826 | 38,636,479 | | 8,543,085 |
| 11 | Winter Direct Gas Adjustment Factor (GAF) | | 33,512,083 | 0.8184 | 27,427,776 |
| 12 | Summer Direct Gas Adjustment Factor (GAF) | | 5,124,396 | 0.8485 | 4,348,236 |
| 13 | Winter Indirect Gas Adjustment Factor (GAF) | | 33,512,083 | 0.0486 | 1,627,923 |
| 14 | Summer Indirect Gas Adjustment Factor (GAF) | | 5,124,396 | 0.0585 | 299,777 |
| 15 | Winter Distribution Adjustment Factor (DAF) | | 33,512,083 | 0.0118 | 394,947 |
| 16 | Summer Distribution Adjustment Factor (DAF) | | 5,124,396 | 0.0204 | <u>104,536</u> |
| 17 | Total Revenue | | | | 42,746,280 |
| 18 | Rate G-51 C&I Medium Annual / Low Winter | | | | |
| 19 | Winter Customer Charge | 7,692 | | 45.04 | 346,448 |
| 20 | Summer Customer Charge | 7,558 | | 45.04 | 340,412 |
| 21 | Winter Commodity Charge: | | | | |
| 22 | First 700 Therms | | 4,608,855 | 0.1708 | 787,192 |
| 23 | Over 700 Therms | | 3,507,671 | 0.1315 | 461,259 |
| 24 | Summer Commodity Charge: | | | | |
| 25 | First 500 Therms | | 3,120,285 | 0.1000 | 312,029 |
| 26 | Over 500 Therms | | <u>2,482,096</u> | 0.0765 | <u>189,880</u> |
| 27 | Total Base Revenue | 15,250 | 13,718,907 | | 2,437,220 |
| 28 | Winter Direct Gas Adjustment Factor (GAF) | | 8,116,526 | 0.7606 | 6,173,431 |
| 29 | Summer Direct Gas Adjustment Factor (GAF) | | 5,602,381 | 0.7804 | 4,371,925 |
| 30 | Winter Indirect Gas Adjustment Factor (GAF) | | 8,116,526 | 0.0395 | 320,877 |
| 31 | Summer Indirect Gas Adjustment Factor (GAF) | | 5,602,381 | 0.0589 | 329,979 |
| 32 | Winter Distribution Adjustment Factor (DAF) | | 8,116,526 | 0.0124 | 100,504 |
| 33 | Summer Distribution Adjustment Factor (DAF) | | 5,602,381 | 0.0204 | <u>114,289</u> |
| 34 | Total Revenue | | | | 13,848,225 |
| 35 | Rate G-42 C&I High Annual / High Winter | | | | |
| 36 | Winter Customer Charge | 1,612 | | 109.37 | 176,304 |
| 37 | Summer Customer Charge | 1,719 | | 109.37 | 188,007 |
| 38 | Winter Commodity Charge: | | | | |
| 39 | First 9,000 Therms | | 10,546,755 | 0.1658 | 1,748,652 |
| 40 | Over 9,000 Therms | | 4,052,965 | 0.1317 | 533,775 |
| 41 | Summer Commodity Charge: | | | | |
| 42 | First 2,200 Therms | | 1,723,995 | 0.0687 | 118,438 |
| 43 | Over 2,200 Therms | | <u>1,159,973</u> | 0.0573 | <u>66,466</u> |
| 44 | Total Base Revenue | 3,331 | 17,483,688 | | 2,831,642 |
| 45 | Winter Direct Gas Adjustment Factor (GAF) | | 14,599,720 | 0.7799 | 11,386,539 |
| 46 | Summer Direct Gas Adjustment Factor (GAF) | | 2,883,968 | 0.8346 | 2,406,876 |
| 47 | Winter Indirect Gas Adjustment Factor (GAF) | | 14,599,720 | 0.0480 | 701,197 |
| 48 | Summer Indirect Gas Adjustment Factor (GAF) | | 2,883,968 | 0.0597 | 172,174 |
| 49 | Winter Distribution Adjustment Factor (DAF) | | 14,599,720 | 0.0118 | 172,975 |
| 50 | Summer Distribution Adjustment Factor (DAF) | | 2,883,968 | 0.0204 | <u>58,832</u> |
| 51 | Total Revenue | | | | 17,730,235 |

Bay State Gas Company
Revenue @ Current Rates Based on Per Books Adjusted Bills and Volumes
For the 12 Months Ending December 31, 2004

| <u>Description</u> | <u>Bills</u> (1) (Sch JAF1-3) | <u>Volumes</u> (2) Therms (Sch JAF1-4) | <u>Base Rate</u> (3) \$/Therm | <u>Revenue</u> (4) \$ |
|---|-------------------------------------|---|-------------------------------------|-----------------------------|
| 1 Rate G-52 C&I High Annual / Low Winter | | | | |
| 2 Winter Customer Charge | 558 | | 109.37 | 61,028 |
| 3 Summer Customer Charge | 542 | | 109.37 | 59,279 |
| 4 Winter Commodity Charge: | | | | |
| 5 First 10,000 Therms | | 3,147,730 | 0.1638 | 515,598 |
| 6 Over 10,000 Therms | | 656,853 | 0.1288 | 84,603 |
| 7 Summer Commodity Charge: | | | | |
| 8 First 8,000 Therms | | 2,077,886 | 0.0712 | 147,945 |
| 9 Over 8,000 Therms | | <u>783,422</u> | 0.0569 | <u>44,577</u> |
| 10 Total Base Revenue | 1,100 | 6,665,891 | | 913,030 |
| 11 Winter Direct Gas Adjustment Factor (GAF) | | 3,804,583 | 0.7705 | 2,931,479 |
| 12 Summer Direct Gas Adjustment Factor (GAF) | | 2,861,308 | 0.7862 | 2,249,653 |
| 13 Winter Indirect Gas Adjustment Factor (GAF) | | 3,804,583 | 0.0395 | 150,322 |
| 14 Summer Indirect Gas Adjustment Factor (GAF) | | 2,861,308 | 0.0617 | 176,541 |
| 15 Winter Distribution Adjustment Factor (DAF) | | 3,804,583 | 0.0125 | 47,409 |
| 16 Summer Distribution Adjustment Factor (DAF) | | 2,861,308 | 0.0204 | <u>58,371</u> |
| 17 Total Revenue | | | | 6,526,805 |
| 18 Rate G-43 C&I Extra High Annual / High Winter | | | | |
| 19 Winter Customer Charge | 32 | | 298.53 | 9,553 |
| 20 Summer Customer Charge | 29 | | 298.53 | 8,657 |
| 21 Winter Demand Charge | | 142,795 | 1.9787 | 282,548 |
| 22 Winter Commodity Charge: | | | | |
| 23 All Gas Consumed | | 3,128,697 | 0.0389 | 121,706 |
| 24 Summer Demand Charge | | 43,491 | 0.8723 | 37,937 |
| 25 Summer Commodity Charge: | | | | |
| 26 All Gas Consumed | | <u>1,303,249</u> | 0.0170 | <u>22,155</u> |
| 27 Total Base Revenue | 61 | 4,431,946 | | 482,556 |
| 28 Winter Direct Gas Adjustment Factor (GAF) | | 3,128,697 | 0.7300 | 2,283,880 |
| 29 Summer Direct Gas Adjustment Factor (GAF) | | 1,303,249 | 0.8420 | 1,097,293 |
| 30 Winter Indirect Gas Adjustment Factor (GAF) | | 3,128,697 | 0.0457 | 143,101 |
| 31 Summer Indirect Gas Adjustment Factor (GAF) | | 1,303,249 | 0.0597 | 77,805 |
| 32 Winter Distribution Adjustment Factor (DAF) | | 3,128,697 | 0.0100 | 31,403 |
| 33 Summer Distribution Adjustment Factor (DAF) | | 1,303,249 | 0.0204 | <u>26,587</u> |
| 34 Total Revenue | | | | 4,142,625 |
| 35 Rate G-53 C&I Extra High Annual / Low Winter | | | | |
| 36 Winter Customer Charge | 56 | | 298.53 | 16,718 |
| 37 Summer Customer Charge | 35 | | 298.53 | 10,449 |
| 38 Winter Demand Charge | | 113,138 | 1.9787 | 223,866 |
| 39 Winter Commodity Charge: | | | | |
| 40 All Gas Consumed | | 2,286,988 | 0.0389 | 88,964 |
| 41 Summer Demand Charge | | 53,476 | 0.8723 | 46,647 |
| 42 Summer Commodity Charge: | | | | |
| 43 All Gas Consumed | | <u>867,009</u> | 0.0170 | <u>14,739</u> |
| 44 Total Base Revenue | 91 | 3,153,997 | | 401,383 |
| 45 Winter Direct Gas Adjustment Factor (GAF) | | 2,286,988 | 0.7959 | 1,820,147 |
| 46 Summer Direct Gas Adjustment Factor (GAF) | | 867,009 | 0.7731 | 670,293 |
| 47 Winter Indirect Gas Adjustment Factor (GAF) | | 2,286,988 | 0.0429 | 98,211 |
| 48 Summer Indirect Gas Adjustment Factor (GAF) | | 867,009 | 0.0617 | 53,494 |
| 49 Winter Distribution Adjustment Factor (DAF) | | 2,286,988 | 0.0141 | 32,171 |
| 50 Summer Distribution Adjustment Factor (DAF) | | 867,009 | 0.0204 | <u>17,686</u> |
| 51 Total Revenue | | | | 3,093,385 |

Bay State Gas Company
Revenue @ Current Rates Based on Per Books Adjusted Bills and Volumes
For the 12 Months Ending December 31, 2004

| <u>No.</u> | <u>Description</u> | <u>Bills</u> (1) (Sch JAF1-3) | <u>Volumes</u> (2) Therms (Sch JAF1-4) | <u>Base Rate</u> (3) \$/Therm | <u>Revenue</u> (4) \$ |
|------------|--|-------------------------------------|---|-------------------------------------|-----------------------------|
| 1 | Tariff Sales Summary by Customer Class | | | | |
| 2 | Total Residential Sales Base Revenue | 3,043,100 | 254,100,726 | | 93,910,257 |
| 3 | Total Residential Sales Direct Gas Adjustment Factor (GAF) | | | | 216,689,229 |
| 4 | Total Residential Sales Indirect Gas Adjustment Factor (GAF) | | | | 13,573,678 |
| 5 | Total Residential Sales Distribution Adjustment Factor (DAF) | | | | <u>3,537,586</u> |
| 6 | Total Residential Sales Revenue | | | | 327,710,750 |
| 7 | Total Commercial / Industrial Sales Base Revenue | 99,506 | 111,848,322 | | 26,336,097 |
| 8 | Total Commercial / Industrial Sales Direct Gas Adjustment Factor (GAF) | | | | 90,789,422 |
| 9 | Total Commercial / Industrial Sales Indirect Gas Adjustment Factor (GAF) | | | | 5,555,933 |
| 10 | Total Commercial / Industrial Distribution Adjustment Factor (DAF) | | | | <u>1,524,021</u> |
| 11 | Total Commercial/Industrial Sales Revenue | | | | 124,205,473 |
| 12 | Total Tariff Sales Base Revenue | 3,142,606 | 365,949,048 | | 120,246,354 |
| 13 | Total Tariff Sales Direct Gas Adjustment Factor (GAF) | | | | 307,478,651 |
| 14 | Total Tariff Sales Indirect Gas Adjustment Factor (GAF) | | | | 19,129,611 |
| 15 | Total Tariff Sales Distribution Adjustment Factor (DAF) | | | | <u>5,061,607</u> |
| 16 | Total Tariff Sales Revenue | | | | 451,916,223 |
| 17 | RESIDENTIAL TRANSPORTATION | | | | |
| 18 | Rate T-1 Residential Non-Heating Choice Monthly | | | | |
| 19 | Winter Customer Charge | 29 | | 7.46 | 216 |
| 20 | Summer Customer Charge | 30 | | 7.46 | 224 |
| 21 | Winter Commodity Charge: | | | | |
| 22 | First 12 Therms | | 306 | 0.4349 | 133 |
| 23 | Over 12 Therms | | 721 | 0.3758 | 271 |
| 24 | Summer Commodity Charge: | | | | |
| 25 | First 10 Therms | | 265 | 0.3848 | 102 |
| 26 | Over 10 Therms | | 616 | 0.2965 | 183 |
| 27 | Total Base Revenue | 59 | 1,908 | | 1,129 |
| 28 | Winter Distribution Adjustment Factor (DAF) | | 1,027 | 0.0049 | 5 |
| 29 | Summer Distribution Adjustment Factor (DAF) | | 881 | 0.0136 | 12 |
| 30 | Total Revenue | | | | 1,146 |
| 31 | Rate T-3 Residential Heating Choice | | | | |
| 32 | Winter Customer Charge | 223 | | 7.47 | 1,666 |
| 33 | Summer Customer Charge | 217 | | 7.47 | 1,621 |
| 34 | Winter Commodity Charge: | | | | |
| 35 | First 90 Therms | | 18,105 | 0.4000 | 7,242 |
| 36 | Over 90 Therms | | 44,795 | 0.2076 | 9,299 |
| 37 | Summer Commodity Charge: | | | | |
| 38 | First 30 Therms | | 5,269 | 0.2317 | 1,221 |
| 39 | Over 30 Therms | | 11,380 | 0.1639 | 1,865 |
| 40 | Total Base Revenue | 440 | 79,549 | | 22,914 |
| 41 | Winter Distribution Adjustment Factor (DAF) | | 62,900 | 0.0139 | 875 |
| 42 | Summer Distribution Adjustment Factor (DAF) | | 16,649 | 0.0156 | 260 |
| 43 | Total Revenue | | | | 24,049 |

Bay State Gas Company
Revenue @ Current Rates Based on Per Books Adjusted Bills and Volumes
For the 12 Months Ending December 31, 2004

| No. | Description | Bills (1) (Sch JAF1-3) | Volumes (2) Therms (Sch JAF1-4) | Base Rate (3) \$/Therm | Revenue (4) \$ |
|-----|---|------------------------------|--|------------------------------|----------------------|
| 1 | Rate T-4 Residential Heating - Low Income Choice | | | | |
| 2 | Winter Customer Charge | 0 | | 5.97 | 0 |
| 3 | Summer Customer Charge | 0 | | 5.97 | 0 |
| 4 | Winter Commodity Charge: | | | | |
| 5 | First 90 Therms | | 0 | 0.2247 | 0 |
| 6 | Over 90 Therms | | 0 | 0.0709 | 0 |
| 7 | Summer Commodity Charge: | | | | |
| 8 | First 30 Therms | | 0 | 0.1243 | 0 |
| 9 | Over 30 Therms | | 0 | 0.0700 | 0 |
| 10 | Total Base Revenue | 0 | | | 0 |
| 11 | Winter Distribution Adjustment Factor (DAF) | | | 0.0000 | 0 |
| 12 | Summer Distribution Adjustment Factor (DAF) | | | 0.0000 | 0 |
| 13 | Total Revenue | | | | 0 |
| 14 | Rate T-40 C&I Low Annual / High Winter | | | | |
| 15 | Winter Customer Charge | 4,602 | | 12.61 | 58,031 |
| 16 | Summer Customer Charge | 4,701 | | 12.61 | 59,280 |
| 17 | Winter Commodity Charge: | | | | |
| 18 | First 125 Therms | | 505,134 | 0.3694 | 186,596 |
| 19 | Over 125 Therms | | 1,115,993 | 0.2315 | 258,352 |
| 20 | Summer Commodity Charge: | | | | |
| 21 | First 35 Therms | | 89,954 | 0.3288 | 29,577 |
| 22 | Over 35 Therms | | <u>188,945</u> | 0.1855 | <u>35,049</u> |
| 23 | Total Base Revenue | 9,303 | 1,900,026 | | 626,885 |
| 24 | Winter Distribution Adjustment Factor (DAF) | | 1,621,127 | 0.0115 | 18,673 |
| 25 | Summer Distribution Adjustment Factor (DAF) | | 278,899 | 0.0204 | <u>5,689</u> |
| 26 | Total Revenue | | | | 651,247 |
| 27 | Rate T-50 C&I Low Annual / Low Winter | | | | |
| 28 | Winter Customer Charge | 2,070 | | 12.61 | 26,103 |
| 29 | Summer Customer Charge | 1,991 | | 12.61 | 25,107 |
| 30 | Winter Commodity Charge: | | | | |
| 31 | First 125 Therms | | 155,589 | 0.3597 | 55,965 |
| 32 | Over 125 Therms | | 342,115 | 0.2268 | 77,592 |
| 33 | Summer Commodity Charge: | | | | |
| 34 | First 80 Therms | | 98,920 | 0.3240 | 32,050 |
| 35 | Over 80 Therms | | <u>201,158</u> | 0.1884 | <u>37,898</u> |
| 36 | Total Base Revenue | 4,061 | 797,782 | | 254,715 |
| 37 | Winter Distribution Adjustment Factor (DAF) | | 497,704 | 0.0118 | 5,874 |
| 38 | Summer Distribution Adjustment Factor (DAF) | | 300,078 | 0.0204 | <u>6,122</u> |
| 39 | Total Revenue | | | | 266,711 |

Bay State Gas Company
Revenue @ Current Rates Based on Per Books Adjusted Bills and Volumes
For the 12 Months Ending December 31, 2004

| No. | Description | Bills (1) (Sch JAF1-3) | Volumes (2) Therms (Sch JAF1-4) | Base Rate (3) \$/Therm | Revenue (4) \$ |
|-----|--|------------------------------|--|------------------------------|----------------------|
| 1 | Rate T-41 C&I Medium Annual / High Winter | | | | |
| 2 | Winter Customer Charge | 6,291 | | 45.04 | 283,347 |
| 3 | Summer Customer Charge | 6,078 | | 45.04 | 273,753 |
| 4 | Winter Commodity Charge: | | | | |
| 5 | First 1,000 Therms | | 5,568,728 | 0.1979 | 1,102,051 |
| 6 | Over 1,000 Therms | | 7,439,176 | 0.1572 | 1,169,438 |
| 7 | Summer Commodity Charge: | | | | |
| 8 | First 300 Therms | | 1,118,124 | 0.1246 | 139,318 |
| 9 | Over 300 Therms | | <u>1,398,085</u> | 0.0988 | <u>138,131</u> |
| 10 | Total Base Revenue | 12,369 | <u>15,524,113</u> | | 3,106,038 |
| 11 | Winter Distribution Adjustment Factor (DAF) | | 13,007,904 | 0.0119 | 154,572 |
| 12 | Summer Distribution Adjustment Factor (DAF) | | 2,516,209 | 0.0204 | <u>51,332</u> |
| 13 | Total Revenue | | | | 3,311,942 |
| 14 | Rate T-51 C&I Medium Annual / Low Winter | | | | |
| 15 | Winter Customer Charge | 3,026 | | 45.04 | 136,291 |
| 16 | Summer Customer Charge | 2,797 | | 45.04 | 125,977 |
| 17 | Winter Commodity Charge: | | | | |
| 18 | First 700 Therms | | 1,960,146 | 0.1708 | 334,793 |
| 19 | Over 700 Therms | | 2,664,232 | 0.1315 | 350,347 |
| 20 | Summer Commodity Charge: | | | | |
| 21 | First 500 Therms | | 1,236,700 | 0.1000 | 123,670 |
| 22 | Over 500 Therms | | <u>1,789,398</u> | 0.0765 | <u>136,889</u> |
| 23 | Total Base Revenue | 5,823 | 7,650,476 | | 1,207,967 |
| 24 | Winter Distribution Adjustment Factor (DAF) | | 4,624,378 | 0.0123 | 56,781 |
| 25 | Summer Distribution Adjustment Factor (DAF) | | 3,026,098 | 0.0204 | <u>61,732</u> |
| 26 | Total Revenue | | | | 1,326,480 |
| 27 | Rate T-42 C&I High Annual / High Winter | | | | |
| 28 | Winter Customer Charge | 2,050 | | 109.37 | 224,209 |
| 29 | Summer Customer Charge | 2,051 | | 109.37 | 224,318 |
| 30 | Winter Commodity Charge: | | | | |
| 31 | First 9,000 Therms | | 14,755,633 | 0.1658 | 2,446,484 |
| 32 | Over 9,000 Therms | | 7,451,026 | 0.1317 | 981,300 |
| 33 | Summer Commodity Charge: | | | | |
| 34 | First 2,200 Therms | | 2,478,355 | 0.0687 | 170,263 |
| 35 | Over 2,200 Therms | | <u>1,966,704</u> | 0.0573 | <u>112,692</u> |
| 36 | Total Base Revenue | 4,101 | 26,651,718 | | 4,159,266 |
| 37 | Winter Distribution Adjustment Factor (DAF) | | 22,206,659 | 0.0118 | 261,237 |
| 38 | Summer Distribution Adjustment Factor (DAF) | | 4,445,059 | 0.0204 | <u>90,679</u> |
| 39 | Total Revenue | | | | 4,511,182 |

Bay State Gas Company
Revenue @ Current Rates Based on Per Books Adjusted Bills and Volumes
For the 12 Months Ending December 31, 2004

| No. | Description | Bills (1) | Volumes (2) Therms | Base Rate (3) \$/Therm | Revenue (4) \$ |
|-----|--|----------------|--------------------------|------------------------------|----------------------|
| | | (Sch JAF1-3-1) | (Sch JAF1-4-1) | | |
| 1 | Rate T-52 C&I High Annual / Low Winter | | | | |
| 2 | Winter Customer Charge | 972 | | 109.37 | 106,308 |
| 3 | Summer Customer Charge | 917 | | 109.37 | 100,292 |
| 4 | Winter Commodity Charge: | | | | |
| 5 | First 10,000 Therms | | 7,257,566 | 0.1638 | 1,188,789 |
| 6 | Over 10,000 Therms | | 3,694,479 | 0.1288 | 475,849 |
| 7 | Summer Commodity Charge: | | | | |
| 8 | First 8,000 Therms | | 5,128,242 | 0.0712 | 365,131 |
| 9 | Over 8,000 Therms | | <u>2,759,090</u> | 0.0569 | <u>156,992</u> |
| 10 | Total Base Revenue | 1,889 | <u>18,839,377</u> | | 2,393,361 |
| 11 | Winter Distribution Adjustment Factor (DAF) | | 10,952,045 | 0.0123 | 135,091 |
| 12 | Summer Distribution Adjustment Factor (DAF) | | 7,887,332 | 0.0204 | <u>160,901</u> |
| 13 | Total Revenue | | | | 2,689,353 |
| 14 | Rate T-43 C&I Extra High Annual / High Winter | | | | |
| 15 | Winter Customer Charge | 60 | | 298.53 | 17,912 |
| 16 | Summer Customer Charge | 60 | | 298.53 | 17,912 |
| 17 | Winter Demand Charge | | 199,731 | 1.9787 | 395,208 |
| 18 | Winter Commodity Charge: | | | | |
| 19 | All Gas Consumed | | 4,082,507 | 0.0389 | 158,810 |
| 20 | Summer Demand Charge | | 59,766 | 0.8723 | 52,134 |
| 21 | Summer Commodity Charge: | | | | |
| 22 | All Gas Consumed | | <u>953,578</u> | 0.0170 | <u>16,211</u> |
| 23 | Total Base Revenue | 120 | 5,036,085 | | 658,187 |
| 24 | Winter Distribution Adjustment Factor (DAF) | | 4,082,507 | 0.0119 | 48,543 |
| 25 | Summer Distribution Adjustment Factor (DAF) | | 953,578 | 0.0204 | <u>19,452</u> |
| 26 | Total Revenue | | | | 726,182 |
| 27 | Rate T-53 C&I Extra High Annual / Low Winter | | | | |
| 28 | Winter Customer Charge | 354 | | 298.53 | 105,680 |
| 29 | Summer Customer Charge | 354 | | 298.53 | 105,680 |
| 30 | Winter Demand Charge | | 1,275,677 | 1.9787 | 2,524,182 |
| 31 | Winter Commodity Charge: | | | | |
| 32 | All Gas Consumed | | 26,368,965 | 0.0389 | 1,025,753 |
| 33 | Summer Demand Charge | | 1,131,346 | 0.8723 | 986,873 |
| 34 | Summer Commodity Charge: | | | | |
| 35 | All Gas Consumed | | <u>24,699,265</u> | 0.0170 | <u>419,888</u> |
| 36 | Total Base Revenue | 708 | 51,068,230 | | 5,168,056 |
| 37 | Winter Distribution Adjustment Factor (DAF) | | 26,368,965 | 0.0121 | 319,560 |
| 38 | Summer Distribution Adjustment Factor (DAF) | | 24,699,265 | 0.0204 | <u>503,865</u> |
| 39 | Total Revenue | | | | 5,991,481 |
| 40 | Special Contract | | | | |
| 41 | Total Base Revenue | 60 | 116,214,683 | | 3,502,265 |

Bay State Gas Company
Revenue @ Current Rates Based on Per Books Adjusted Bills and Volumes
For the 12 Months Ending December 31, 2004

| <u>No.</u> | <u>Description</u> | <u>Bills</u> (1) <small>(Sch JAF1-3-1)</small> | <u>Volumes</u> (2) Therms <small>(Sch JAF1-4-1)</small> | <u>Base Rate</u> (3) \$/Therm | <u>Revenue</u> (4) \$ |
|------------|---|--|--|-------------------------------------|-----------------------------|
| 1 | Transportation Summary | | | | |
| 2 | Total Residential Transportation Base Revenue | 499 | 81,457 | | 24,043 |
| 3 | Total Residential Transportation Distribution Adjustment Factor (DAF) | | | | <u>1,152</u> |
| 4 | Total Residential Transportation Revenue | | | | 25,195 |
| 5 | Total Commercial / Industrial Transportation Base Revenue | 38,434 | 243,682,490 | | 21,076,740 |
| 6 | Total Commercial / Industrial Transportation Distribution Adjustment Factor (DAF) | | | | <u>1,900,103</u> |
| 7 | Total Commercial/Industrial Transportation Revenue | | | | 22,976,843 |
| 8 | Total Transportation Base Revenue | 38,933 | 243,763,947 | | 21,100,783 |
| 9 | Total Transportation Distribution Adjustment Factor (DAF) | | | | <u>1,901,255</u> |
| 10 | Total Transportation Revenue | | | | 23,002,038 |
| 11 | Total Company Revenue | 3,181,539 | 609,712,995 | | 474,918,261 |

Bay State Gas Company
 Number of Bills
 For the 12 Months Ending December 31, 2004

| <u>No.</u> | <u>Description</u> | <u>Unadjusted</u> (1) | <u>Rate</u> <u>Schedule</u> <u>Transfers</u> (2) | <u>Test Year</u> <u>Adjusted</u> (3=1+2) |
|------------|--|--------------------------|---|--|
| 1 | RESIDENTIAL SALES | | | |
| 2 | Rate R-1 Residential Non-Heating Bi-Monthly | | | |
| 3 | Winter | 12,995 | 0 | 12,995 |
| 4 | Summer | 9,596 | 0 | 9,596 |
| 5 | Rate R-1 Residential Non-Heating | | | |
| 6 | Winter | 158,423 | 0 | 158,423 |
| 7 | Summer | 176,837 | 0 | 176,837 |
| 8 | Rate R-2 Residential Non-Heating - Bi Monthly Low Income | | | |
| 9 | Winter | 493 | 0 | 493 |
| 10 | Summer | 470 | 0 | 470 |
| 11 | Rate R-2 Residential Non-Heat - Low Income | | | |
| 12 | Winter | 9,325 | 0 | 9,325 |
| 13 | Summer | 8,763 | 0 | 8,763 |
| 14 | Rate R-3 Residential Heating | | | |
| 15 | Winter | 1,227,579 | 0 | 1,227,579 |
| 16 | Summer | 1,222,254 | 0 | 1,222,254 |
| 17 | Rate R-4 Residential Heating - Low Income | | | |
| 18 | Winter | 113,631 | 0 | 113,631 |
| 19 | Summer | 102,590 | 0 | 102,590 |
| 20 | Rate L-60 Outdoor Lighting | | | |
| 21 | Winter | 72 | 0 | 72 |
| 22 | Summer | 72 | 0 | 72 |
| 23 | COMMERCIAL & INDUSTRIAL (C&I) SALES | | | |
| 24 | Rate G-40 C&I Low Annual / High Winter | | | |
| 25 | Winter | 96,712 | 0 | 96,712 |
| 26 | Summer | 94,191 | 0 | 94,191 |
| 27 | Rate G-50 C&I Low Annual / Low Winter | | | |
| 28 | Winter | 18,101 | 0 | 18,101 |
| 29 | Summer | 17,746 | 0 | 17,746 |
| 30 | Rate G-41 C&I Medium Annual / High Winter | | | |
| 31 | Winter | 21,670 | 0 | 21,670 |
| 32 | Summer | 22,156 | 0 | 22,156 |

Bay State Gas Company
 Number of Bills
 For the 12 Months Ending December 31, 2004

| Line No. | Description | Unadjusted (1) | Rate Schedule Transfers (2) | Test Year Adjusted (3=1+2) |
|----------|--|----------------|-----------------------------|----------------------------|
| 1 | COMMERCIAL & INDUSTRIAL (C&I) SALES | | | |
| 2 | Rate G-51 C&I Medium Annual / Low Winter | | | |
| 3 | Winter | 7,692 | 0 | 7,692 |
| 4 | Summer | 7,558 | 0 | 7,558 |
| 5 | Rate G-42 C&I High Annual / High Winter | | | |
| 6 | Winter | 1,612 | 0 | 1,612 |
| 7 | Summer | 1,719 | 0 | 1,719 |
| 8 | Rate G-52 C&I High Annual / Low Winter | | | |
| 9 | Winter | 558 | 0 | 558 |
| 10 | Summer | 542 | 0 | 542 |
| 11 | Rate G-43 C&I Extra High Annual / High Winter | | | |
| 12 | Winter | 32 | 0 | 32 |
| 13 | Summer | 29 | 0 | 29 |
| 14 | Rate G-53 C&I Extra High Annual / Low Winter | | | |
| 15 | Winter | 56 | 0 | 56 |
| 16 | Summer | 35 | 0 | 35 |

| Line No. | Tariff Sales Summary by Customer Class | Unadjusted (1) | Rate Schedule Transfers (2) | Test Year Adjusted (3=1+2) |
|----------|---|----------------|-----------------------------|----------------------------|
| 17 | Tariff Sales Summary by Customer Class | | | |
| 18 | Total Residential Sales | 3,043,100 | 0 | 3,043,100 |
| 19 | Total Commercial / Industrial Sales | 290,409 | 0 | 290,409 |
| 20 | Total Tariff Sales | 3,333,509 | 0 | 3,333,509 |

Bay State Gas Company
 Number of Bills
 For the 12 Months Ending December 31, 2004

| Line No. | Description | Unadjusted (1) | Rate Schedule Transfers (2) | Test Year Adjusted (3=1+2) |
|----------|---|----------------|-----------------------------|----------------------------|
| 1 | RESIDENTIAL TRANSPORTATION | | | |
| 2 | Rate T-1 Residential Non-Heating Choice Monthly | | | |
| 3 | Winter | 29 | 0 | 29 |
| 4 | Summer | 30 | 0 | 30 |
| 5 | Rate T-3 Residential Heating Choice | | | |
| 6 | Winter | 223 | 0 | 223 |
| 7 | Summer | 217 | 0 | 217 |
| 8 | Rate T-4 Residential Heating - Low Income Choice | | | |
| 9 | Winter | 0 | 0 | 0 |
| 10 | Summer | 0 | 0 | 0 |
| 11 | COMMERCIAL & INDUSTRIAL (C&I) TRANSPORTATION | | | |
| 12 | Rate T-40 C&I Low Annual / High Winter | | | |
| 13 | Winter | 4,602 | 0 | 4,602 |
| 14 | Summer | 4,701 | 0 | 4,701 |
| 15 | Rate T-50 C&I Low Annual / Low Winter | | | |
| 16 | Winter | 2,070 | 0 | 2,070 |
| 17 | Summer | 1,991 | 0 | 1,991 |
| 18 | Rate T-41 C&I Medium Annual / High Winter | | | |
| 19 | Winter | 6,291 | 0 | 6,291 |
| 20 | Summer | 6,078 | 0 | 6,078 |
| 21 | Rate T-51 C&I Medium Annual / Low Winter | | | |
| 22 | Winter | 3,026 | 0 | 3,026 |
| 23 | Summer | 2,797 | 0 | 2,797 |
| 24 | Rate T-42 C&I High Annual / High Winter | | | |
| 25 | Winter | 2,050 | 0 | 2,050 |
| 26 | Summer | 2,051 | 0 | 2,051 |
| 27 | Rate T-52 C&I High Annual / Low Winter | | | |
| 28 | Winter | 972 | 0 | 972 |
| 29 | Summer | 917 | 0 | 917 |

Bay State Gas Company
 Number of Bills
 For the 12 Months Ending December 31, 2004

| Line No. | Description | Unadjusted (1) | Rate Schedule Transfers (3) | Test Year Adjusted (4=1+2+3) |
|---|---|----------------|-----------------------------|------------------------------|
| 1 | Rate T-43 C&I Extra High Annual / High Winter | | | |
| 2 | Winter | 60 | 0 | 60 |
| 3 | Summer | 60 | 0 | 60 |
| 4 | Rate T-53 C&I Extra High Annual / Low Winter | | | |
| 5 | Winter | 354 | 0 | 354 |
| 6 | Summer | 354 | 0 | 354 |
| 7 | Special Contract | 60 | 0 | 60 |
| Transportation Summary by Customer Class | | | | |
| 8 | Transportation Summary by Customer Class | | | |
| 9 | Total Residential Transportation | 499 | 0 | 499 |
| 10 | Total Commercial / Industrial Transportation | <u>38,434</u> | <u>0</u> | <u>38,434</u> |
| 11 | Total Transportation | 38,933 | 0 | 38,933 |
| 12 | Total Company Throughput | 3,372,442 | 0 | 3,372,442 |

Bay State Gas Company
Normalized Volumes (Therms)
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) | Weather Adjustment (2) | Rate Schedule Transfers (3) | Test Year Adjusted (4=1 to 3) |
|----------|--|-------------------|------------------------|-----------------------------|-------------------------------|
| 1 | RESIDENTIAL SALES | | | | |
| | | | (Sch JAF1-5) | | |
| 2 | Rate R-1 Residential Non-Heating Bi-Monthly | | | | |
| 3 | Winter Usage | | | | |
| 4 | First 25 Therms | 278,013 | 0 | 0 | 278,013 |
| 5 | Over 25 Therms | 284,524 | 0 | 0 | 284,524 |
| 6 | Summer Usage | | | | |
| 7 | First 20 Therms | 169,042 | 0 | 0 | 169,042 |
| 8 | Over 20 Therms | 148,468 | 0 | 0 | 148,468 |
| 9 | Total | 880,047 | 0 | 0 | 880,047 |
| 10 | Rate R-1 Residential Non-Heating | | | | |
| 11 | Winter Usage | | | | |
| 12 | First 12 Therms | 1,326,147 | 0 | 0 | 1,326,147 |
| 13 | Over 12 Therms | 1,571,861 | 0 | 0 | 1,571,861 |
| 14 | Summer Usage | | | | |
| 15 | First 10 Therms | 1,220,111 | 0 | 0 | 1,220,111 |
| 16 | Over 10 Therms | 930,363 | 0 | 0 | 930,363 |
| 17 | Total | 5,048,482 | 0 | 0 | 5,048,482 |
| 18 | Rate R-2 Residential Non-Heating - Bi Monthly Low Income | | | | |
| 19 | Winter Usage | | | | |
| 20 | First 25 Therms | 11,776 | 0 | 0 | 11,776 |
| 21 | Over 25 Therms | 20,228 | 0 | 0 | 20,228 |
| 22 | Summer Usage | | | | |
| 23 | First 20 Therms | 8,355 | 0 | 0 | 8,355 |
| 24 | Over 20 Therms | 10,993 | 0 | 0 | 10,993 |
| 25 | Total | 51,352 | 0 | 0 | 51,352 |
| 26 | Rate R-2 Residential Non-Heat - Low Income | | | | |
| 27 | Winter Usage | | | | |
| 28 | First 12 Therms | 71,627 | 0 | 0 | 71,627 |
| 29 | Over 12 Therms | 177,038 | 0 | 0 | 177,038 |
| 30 | Summer Usage | | | | |
| 31 | First 10 Therms | 67,300 | 0 | 0 | 67,300 |
| 32 | Over 10 Therms | 98,412 | 0 | 0 | 98,412 |
| 33 | Total | 414,377 | 0 | 0 | 414,377 |

Bay State Gas Company
Normalized Volumes (Therms)
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) | Weather Adjustment (2) (Sch JAF1-5) | Rate Schedule Transfers (3) | Test Year Adjusted (4=1 to 3) |
|----------|---|-------------------|--|-----------------------------|-------------------------------|
| 1 | RESIDENTIAL SALES | | | | |
| 2 | Rate R-3 Residential Heating | | | | |
| 3 | Winter Usage | | | | |
| 4 | First 90 Therms | 98,410,788 | 86,690 | 0 | 98,497,478 |
| 5 | Over 90 Therms | 94,665,066 | (8,260,318) | 0 | 86,404,748 |
| 6 | Summer Usage | | | | |
| 7 | First 30 Therms | 27,832,445 | 67,322 | 0 | 27,899,767 |
| 8 | Over 30 Therms | 13,808,525 | (49,980) | 0 | 13,758,545 |
| 9 | Total | 234,716,824 | (8,156,286) | 0 | 226,560,538 |
| 10 | Rate R-4 Residential Heating - Low Income | | | | |
| 11 | Winter Usage | | | | |
| 12 | First 90 Therms | 8,568,165 | 8,483 | 0 | 8,576,648 |
| 13 | Over 90 Therms | 9,074,890 | (673,540) | 0 | 8,401,350 |
| 14 | Summer Usage | | | | |
| 15 | First 30 Therms | 2,404,182 | 7,402 | 0 | 2,411,584 |
| 16 | Over 30 Therms | 1,705,982 | 47,638 | 0 | 1,753,620 |
| 17 | Total | 21,753,219 | (610,017) | 0 | 21,143,202 |
| 18 | Rate L-60 Outdoor Lighting | | | | |
| 19 | Winter Usage | | | | |
| 20 | 19 Therms | 1,395 | 0 | 0 | 1,395 |
| 21 | Summer Usage | | | | |
| 22 | 19 Therms | 1,333 | 0 | 0 | 1,333 |
| 23 | Total | 2,728 | 0 | 0 | 2,728 |

Bay State Gas Company
Normalized Volumes (Therms)
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) | Weather Adjustment (2) | Rate Schedule Transfers (3) | Test Year Adjusted (4=1 to 3) |
|---|--------------------|-------------------|------------------------|-----------------------------|-------------------------------|
| 1 COMMERCIAL & INDUSTRIAL (C&I) SALES | | | | | |
| 2 Rate G-40 C&I Low Annual / High Winter | | | | | |
| 3 Winter Usage | | | | | |
| 4 | First 125 Therms | 8,857,428 | (21,409) | 0 | 8,836,019 |
| 5 | Over 125 Therms | 13,094,624 | (1,053,823) | 0 | 12,040,801 |
| 6 Summer Usage | | | | | |
| 7 | First 35 Therms | 1,127,475 | 4,154 | 0 | 1,131,629 |
| 8 | Over 35 Therms | <u>1,301,943</u> | 818 | 0 | <u>1,302,761</u> |
| 9 | Total | 24,381,470 | (1,070,260) | 0 | 23,311,210 |
| 10 Rate G-50 C&I Low Annual / Low Winter | | | | | |
| 11 Winter Usage | | | | | |
| 12 | First 125 Therms | 1,240,429 | 0 | 0 | 1,240,429 |
| 13 | Over 125 Therms | 1,371,743 | 0 | 0 | 1,371,743 |
| 14 Summer Usage | | | | | |
| 15 | First 80 Therms | 736,181 | 0 | 0 | 736,181 |
| 16 | Over 80 Therms | <u>1,097,851</u> | 0 | 0 | <u>1,097,851</u> |
| 17 | Total | 4,446,204 | 0 | 0 | 4,446,204 |
| 18 Rate G-41 C&I Medium Annual / High Winter | | | | | |
| 19 Winter Usage | | | | | |
| 20 | First 1,000 Therms | 17,781,265 | 7,877 | 0 | 17,789,142 |
| 21 | Over 1,000 Therms | 17,352,089 | (1,629,148) | 0 | 15,722,941 |
| 22 Summer Usage | | | | | |
| 23 | First 300 Therms | 2,731,934 | 10,506 | 0 | 2,742,440 |
| 24 | Over 300 Therms | <u>2,388,799</u> | (6,843) | 0 | <u>2,381,956</u> |
| 25 | Total | 40,254,087 | (1,617,608) | 0 | 38,636,479 |

Bay State Gas Company
Normalized Volumes (Therms)
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) | Weather Adjustment (2) (Sch JAF1-5) | Rate Schedule Transfers (3) | Test Year Adjusted (4=1 to 3) |
|----------|--|-------------------|--|-----------------------------|-------------------------------|
| 1 | Rate G-51 C&I Medium Annual / Low Winter | | | | |
| 2 | Winter Usage | | | | |
| 3 | First 700 Therms | 4,608,855 | 0 | 0 | 4,608,855 |
| 4 | Over 700 Therms | 3,507,671 | 0 | 0 | 3,507,671 |
| 5 | Summer Usage | | | | |
| 6 | First 500 Therms | 3,120,285 | 0 | 0 | 3,120,285 |
| 7 | Over 500 Therms | <u>2,482,096</u> | <u>0</u> | <u>0</u> | <u>2,482,096</u> |
| 8 | Total | 13,718,907 | 0 | 0 | 13,718,907 |
| 9 | Rate G-42 C&I High Annual / High Winter | | | | |
| 10 | Winter Usage | | | | |
| 11 | First 9,000 Therms | 10,603,254 | (56,499) | 0 | 10,546,755 |
| 12 | Over 9,000 Therms | 4,613,770 | (560,805) | 0 | 4,052,965 |
| 13 | Summer Usage | | | | |
| 14 | First 2,200 Therms | 1,720,377 | 3,618 | 0 | 1,723,995 |
| 15 | Over 2,200 Therms | <u>1,146,390</u> | <u>13,583</u> | <u>0</u> | <u>1,159,973</u> |
| 16 | Total | 18,083,791 | (600,103) | 0 | 17,483,688 |
| 17 | Rate G-52 C&I High Annual / Low Winter | | | | |
| 18 | Winter Usage | | | | |
| 19 | First 10,000 Therms | 3,147,730 | 0 | 0 | 3,147,730 |
| 20 | Over 10,000 Therms | 656,853 | 0 | 0 | 656,853 |
| 21 | Summer Usage | | | | |
| 22 | First 8,000 Therms | 2,077,886 | 0 | 0 | 2,077,886 |
| 23 | Over 8,000 Therms | <u>783,422</u> | <u>0</u> | <u>0</u> | <u>783,422</u> |
| 24 | Total | 6,665,891 | 0 | 0 | 6,665,891 |

Bay State Gas Company
Normalized Volumes (Therms)
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) | Weather Adjustment (2) (Sch JAF1-5) | Rate Schedule Transfers (3) | Test Year Adjusted (4=1 to 3) |
|----------|---|--------------------|--|-----------------------------|-------------------------------|
| 1 | Rate G-43 C&I Extra High Annual / High Winter | | | | |
| 2 | Winter Usage | | | | |
| 3 | All Gas Consumed | 3,290,680 | (161,983) | 0 | 3,128,697 |
| 4 | Summer Usage | | | | |
| 5 | All Gas Consumed | <u>1,307,471</u> | (4,222) | 0 | <u>1,303,249</u> |
| 6 | Total | 4,598,151 | (166,205) | 0 | 4,431,946 |
| 7 | Rate G-53 C&I Extra High Annual / Low Winter | | | | |
| 8 | Winter Usage | | | | |
| 9 | All Gas Consumed | 2,286,988 | 0 | 0 | 2,286,988 |
| 10 | Summer Usage | | | | |
| 11 | All Gas Consumed | <u>867,009</u> | 0 | 0 | <u>867,009</u> |
| 12 | Total | 3,153,997 | 0 | 0 | 3,153,997 |
| 13 | Tariff Sales Summary by Customer Class | | | | |
| 14 | Total Residential Sales | 262,867,029 | (8,766,303) | 0 | 254,100,726 |
| 15 | Total Commercial / Industrial Sales | <u>115,302,498</u> | <u>(3,454,176)</u> | 0 | <u>111,848,322</u> |
| 16 | Total Tariff Sales | 378,169,527 | (12,220,479) | 0 | 365,949,048 |

Witness: J.A. Ferro
 D.T.E. 05-27
 Exhibit BSG/JAF-1
 Sch JAF 1-4
 Sheet 6 of 9

Bay State Gas Company
Normalized Volumes (Therms)
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) | Weather Adjustment (2) (Sch JAF1-5) | Rate Schedule Transfers (3) | Test Year Adjusted (4=1 to 3) |
|--|-----------------|----------------------|---|--------------------------------|----------------------------------|
| 1 RESIDENTIAL TRANSPORTATION | | | | | |
| 2 Rate T-1 Residential Non-Heating Choice Monthly | | | | | |
| 3 Winter Usage | | | | | |
| 4 | First 12 Therms | 306 | | 0 | 306 |
| 5 | Over 12 Therms | 721 | | 0 | 721 |
| 6 Summer Usage | | | | | |
| 7 | First 10 Therms | 265 | | 0 | 265 |
| 8 | Over 10 Therms | 616 | | 0 | 616 |
| 9 | Total | 1,908 | | 0 | 1,908 |
| 10 Rate T-3 Residential Heating Choice | | | | | |
| 11 Winter Usage | | | | | |
| 12 | First 90 Therms | 18,125 | (20) | 0 | 18,105 |
| 13 | Over 90 Therms | 47,174 | (2,379) | 0 | 44,795 |
| 14 Summer Usage | | | | | |
| 15 | First 30 Therms | 5,261 | 8 | 0 | 5,269 |
| 16 | Over 30 Therms | 11,402 | (22) | 0 | 11,380 |
| 17 | Total | 81,962 | (2,413) | 0 | 79,549 |
| 18 Rate T-4 Residential Heating - Low Income Choice | | | | | |
| 19 Winter Usage | | | | | |
| 20 | First 90 Therms | 0 | | 0 | 0 |
| 21 | Over 90 Therms | 0 | | 0 | 0 |
| 22 Summer Usage | | | | | |
| 23 | First 30 Therms | 0 | | 0 | 0 |
| 24 | Over 30 Therms | 0 | | 0 | 0 |
| 25 | Total | 0 | | 0 | 0 |

Bay State Gas Company
Normalized Volumes (Therms)
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) | Weather Adjustment (2) (Sch JAF1-5) | Rate Schedule Transfers (3) | Test Year Adjusted (4=1 to 3) |
|----------|---|-------------------|--|-----------------------------|-------------------------------|
| 1 | Rate T-40 C&I Low Annual / High Winter | | | | |
| 2 | Winter Usage | | | | |
| 3 | First 125 Therms | 505,143 | (9) | 0 | 505,134 |
| 4 | Over 125 Therms | 1,200,520 | (84,527) | 0 | 1,115,993 |
| 5 | Summer Usage | | | | |
| 6 | First 35 Therms | 89,607 | 347 | 0 | 89,954 |
| 7 | Over 35 Therms | <u>187,519</u> | <u>1,426</u> | 0 | <u>188,945</u> |
| 8 | Total | 1,982,789 | (82,763) | 0 | 1,900,026 |
| 9 | Rate T-50 C&I Low Annual / Low Winter | | | | |
| 10 | Winter Usage | | | | |
| 11 | First 125 Therms | 155,589 | 0 | 0 | 155,589 |
| 12 | Over 125 Therms | 342,115 | 0 | 0 | 342,115 |
| 13 | Summer Usage | | | | |
| 14 | First 80 Therms | 98,920 | 0 | 0 | 98,920 |
| 15 | Over 80 Therms | <u>201,158</u> | <u>0</u> | 0 | <u>201,158</u> |
| 16 | Total | 797,782 | 0 | 0 | 797,782 |
| 17 | Rate T-41 C&I Medium Annual / High Winter | | | | |
| 18 | Winter Usage | | | | |
| 19 | First 1,000 Therms | 5,564,341 | 4,387 | 0 | 5,568,728 |
| 20 | Over 1,000 Therms | 8,050,459 | (611,283) | 0 | 7,439,176 |
| 21 | Summer Usage | | | | |
| 22 | First 300 Therms | 1,113,364 | 4,760 | 0 | 1,118,124 |
| 23 | Over 300 Therms | <u>1,395,894</u> | <u>2,191</u> | 0 | <u>1,398,085</u> |
| 24 | Total | 16,124,058 | (599,945) | 0 | 15,524,113 |

Bay State Gas Company
Normalized Volumes (Therms)
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) | Weather Adjustment (2) (Sch JAF 1-5) | Rate Schedule Transfers (3) | Test Year Adjusted (4=1 to 3) |
|---|---------------------|-------------------|---|-----------------------------|-------------------------------|
| 1 Rate T-51 C&I Medium Annual / Low Winter | | | | | |
| 2 Winter Usage | | | | | |
| 3 | First 700 Therms | 1,960,146 | 0 | 0 | 1,960,146 |
| 4 | Over 700 Therms | 2,664,232 | 0 | 0 | 2,664,232 |
| 5 Summer Usage | | | | | |
| 6 | First 500 Therms | 1,236,700 | 0 | 0 | 1,236,700 |
| 7 | Over 500 Therms | <u>1,789,398</u> | 0 | 0 | <u>1,789,398</u> |
| 8 | Total | 7,650,476 | 0 | 0 | 7,650,476 |
| 9 Rate T-42 C&I High Annual / High Winter | | | | | |
| 10 Winter Usage | | | | | |
| 11 | First 9,000 Therms | 14,796,679 | (41,046) | 0 | 14,755,633 |
| 12 | Over 9,000 Therms | 8,390,257 | (939,231) | 0 | 7,451,026 |
| 13 Summer Usage | | | | | |
| 14 | First 2,200 Therms | 2,470,526 | 7,829 | 0 | 2,478,355 |
| 15 | Over 2,200 Therms | <u>1,927,198</u> | 39,506 | 0 | <u>1,966,704</u> |
| 16 | Total | 27,584,660 | (932,942) | 0 | 26,651,718 |
| 17 Rate T-52 C&I High Annual / Low Winter | | | | | |
| 18 Winter Usage | | | | | |
| 19 | First 10,000 Therms | 7,257,566 | 0 | 0 | 7,257,566 |
| 20 | Over 10,000 Therms | 3,694,479 | 0 | 0 | 3,694,479 |
| 21 Summer Usage | | | | | |
| 22 | First 8,000 Therms | 5,128,242 | 0 | 0 | 5,128,242 |
| 23 | Over 8,000 Therms | <u>2,759,090</u> | 0 | 0 | <u>2,759,090</u> |
| 24 | Total | 18,839,377 | 0 | 0 | 18,839,377 |

Bay State Gas Company
Normalized Volumes (Theems)
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) | Weather Adjustment (2) (Sch JAF1-5) | Rate Schedule Transfers (3) | Test Year Adjusted (4=1 to 3) |
|----------|---|-------------------|--|-----------------------------|-------------------------------|
| 1 | Rate T-43 C&I Extra High Annual / High Winter | | | | |
| 2 | Winter Usage | | | | |
| 3 | All Gas Consumed | 4,265,315 | (182,808) | 0 | 4,082,507 |
| 4 | Summer Usage | | | | |
| 5 | All Gas Consumed | 922,614 | 30,964 | 0 | 953,578 |
| 6 | Total | 5,187,929 | (151,844) | 0 | 5,036,085 |
| 7 | Rate T-53 C&I Extra High Annual / Low Winter | | | | |
| 8 | Winter Usage | | | | |
| 9 | All Gas Consumed | 26,368,965 | 0 | 0 | 26,368,965 |
| 10 | Summer Usage | | | | |
| 11 | All Gas Consumed | 24,699,265 | 0 | 0 | 24,699,265 |
| 12 | Total | 51,068,230 | 0 | 0 | 51,068,230 |
| 13 | Special Contract | 116,214,683 | 0 | 0 | 116,214,683 |
| 14 | Transportation Summary by Customer Class | | | | |
| 15 | Total Residential Trans | 83,870 | (2,413) | 0 | 81,457 |
| 16 | Total Commercial / Industrial Trans | 245,449,984 | (1,767,494) | 0 | 243,682,490 |
| 17 | Total Transportation | 245,533,854 | (1,769,907) | 0 | 243,763,947 |
| 18 | Total Company Throughput | 623,703,381 | (13,990,386) | 0 | 609,712,995 |

Bay State Gas Company
Normalized Volume and Revenue Adjustments
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) Therms (Sch JAF1-4) | Weather Normalized (2) Therms | Weather Normalized Adjustment (3=2-1) Therms | Rate (4) \$/Therm | Revenue (5=3x4) \$ |
|--|-----------------|--|-------------------------------------|--|-------------------------|--------------------------|
| 1 RESIDENTIAL SALES | | | | | | |
| 2 Rate R-1 Residential Non-Heating Bi-Monthly | | | | | | |
| 3 | Winter Usage | | | | | |
| 4 | First 25 Therms | 278,013 | 278,013 | 0 | 0.4349 | 0 |
| 5 | Over 25 Therms | 284,524 | 284,524 | 0 | 0.3758 | 0 |
| 6 | Summer Usage | | | | | |
| 7 | First 20 Therms | 169,042 | 169,042 | 0 | 0.3848 | 0 |
| 8 | Over 20 Therms | 148,468 | 148,468 | 0 | 0.2965 | 0 |
| 9 | Total | 880,047 | 880,047 | 0 | | 0 |
| 10 Rate R-1 Residential Non-Heating | | | | | | |
| 11 | Winter Usage | | | | | |
| 12 | First 12 Therms | 1,326,147 | 1,326,147 | 0 | 0.4349 | 0 |
| 13 | Over 12 Therms | 1,571,861 | 1,571,861 | 0 | 0.3758 | 0 |
| 14 | Summer Usage | | | | | |
| 15 | First 10 Therms | 1,220,111 | 1,220,111 | 0 | 0.3848 | 0 |
| 16 | Over 10 Therms | 930,363 | 930,363 | 0 | 0.2965 | 0 |
| 17 | Total | 5,048,482 | 5,048,482 | 0 | | 0 |
| 18 Rate R-2 Residential Non-Heating - Bi Monthly Low Income | | | | | | |
| 19 | Winter Usage | | | | | |
| 20 | First 25 Therms | 11,776 | 11,776 | 0 | 0.2869 | 0 |
| 21 | Over 25 Therms | 20,228 | 20,228 | 0 | 0.2396 | 0 |
| 22 | Summer Usage | | | | | |
| 23 | First 20 Therms | 8,355 | 8,355 | 0 | 0.2517 | 0 |
| 24 | Over 20 Therms | 10,993 | 10,993 | 0 | 0.1811 | 0 |
| 25 | Total | 51,352 | 51,352 | 0 | | 0 |

Bay State Gas Company
Normalized Volume and Revenue Adjustments
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) Therms (Sch JAF1-4) | Weather Normalized (2) Therms | Weather Normalized Adjustment (3=2-1) Therms | Base Rate (4) \$/Therm | Revenue (5=3x4) \$ |
|---|-----------------|---|----------------------------------|---|---------------------------|-----------------------|
| 1 Rate R-2 Residential Non-Heat - Low Income | | | | | | |
| 2 | Winter Usage | | | | | |
| 3 | First 12 Therms | 71,627 | 71,627 | 0 | 0.2869 | 0 |
| 4 | Over 12 Therms | 177,038 | 177,038 | 0 | 0.2396 | 0 |
| 5 | Summer Usage | | | | | |
| 6 | First 10 Therms | 67,300 | 67,300 | 0 | 0.2517 | 0 |
| 7 | Over 10 Therms | <u>98,412</u> | <u>98,412</u> | 0 | 0.1811 | 0 |
| 8 | Total | 414,377 | 414,377 | 0 | | 0 |
| 9 Rate R-3 Residential Heating | | | | | | |
| 10 | Winter Usage | | | | | |
| 11 | First 90 Therms | 98,410,788 | 98,497,478 | 86,690 | 0.4000 | 34,676 |
| 12 | Over 90 Therms | 94,665,066 | 86,404,748 | (8,260,318) | 0.2076 | (1,714,842) |
| 13 | Summer Usage | | | | | |
| 14 | First 30 Therms | 27,832,445 | 27,899,767 | 67,322 | 0.2317 | 15,599 |
| 15 | Over 30 Therms | <u>13,808,525</u> | <u>13,758,545</u> | <u>(49,980)</u> | 0.1639 | (8,192) |
| 16 | Total | 234,716,824 | 226,560,538 | (8,156,286) | | (1,672,759) |
| 17 Rate R-4 Residential Heating - Low Income | | | | | | |
| 18 | Winter Usage | | | | | |
| 19 | First 90 Therms | 8,568,165 | 8,576,648 | 8,483 | 0.2247 | 1,906 |
| 20 | Over 90 Therms | 9,074,890 | 8,401,350 | (673,540) | 0.0709 | (47,754) |
| 21 | Summer Usage | | | | | |
| 22 | First 30 Therms | 2,404,182 | 2,411,584 | 7,402 | 0.1243 | 920 |
| 23 | Over 30 Therms | <u>1,705,982</u> | <u>1,753,620</u> | <u>47,638</u> | 0.0700 | 3,335 |
| 24 | Total | 21,753,219 | 21,143,202 | (610,017) | | (41,593) |

Bay State Gas Company
Normalized Volume and Revenue Adjustments
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) Therms (Sch JAF1-4) | Weather Normalized (2) Therms | Weather Normalized Adjustment (3=2-1) Therms | Base Rate (4) \$/Therm | Revenue (5=3x4) \$ |
|----------|--|---|----------------------------------|---|---------------------------|-----------------------|
| 1 | Rate L-60 Outdoor Lighting | | | | | |
| 2 | Winter Usage | | | | | |
| 3 | 19 Therms | 1,395 | 1,395 | 0 | 0.0000 | 0 |
| 4 | Summer Usage | | | | | |
| 5 | 19 Therms | 1,333 | 1,333 | 0 | 0.0000 | 0 |
| 6 | Total | 2,728 | 2,728 | 0 | | 0 |
| 7 | COMMERCIAL & INDUSTRIAL (C&I) SALES | | | | | |
| 8 | Rate G-40 C&I Low Annual / High Winter | | | | | |
| 9 | Winter Usage | | | | | |
| 10 | First 125 Therms | 8,857,428 | 8,836,019 | (21,409) | 0.3694 | (7,908) |
| 11 | Over 125 Therms | 13,094,624 | 12,040,801 | (1,053,823) | 0.2315 | (243,960) |
| 12 | Summer Usage | | | | | |
| 13 | First 35 Therms | 1,127,475 | 1,131,629 | 4,154 | 0.3288 | 1,366 |
| 14 | Over 35 Therms | 1,301,943 | 1,302,761 | 818 | 0.1855 | 152 |
| 15 | Total | 24,381,470 | 23,311,210 | (1,070,260) | | (250,350) |
| 16 | Rate G-50 C&I Low Annual / Low Winter | | | | | |
| 17 | Winter Usage | | | | | |
| 18 | First 125 Therms | 1,240,429 | 1,240,429 | 0 | 0.3597 | 0 |
| 19 | Over 125 Therms | 1,371,743 | 1,371,743 | 0 | 0.2268 | 0 |
| 20 | Summer Usage | | | | | |
| 21 | First 80 Therms | 736,181 | 736,181 | 0 | 0.3240 | 0 |
| 22 | Over 80 Therms | 1,097,851 | 1,097,851 | 0 | 0.1884 | 0 |
| 23 | Total | 4,446,204 | 4,446,204 | 0 | | 0 |

Bay State Gas Company
Normalized Volume and Revenue Adjustments
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) Therms (Sch JAF1-4) | Weather Normalized (2) Therms | Weather Normalized Adjustment (3=2-1) Therms | Base Rate (4) \$/Therm | Revenue (5=3x4) \$ |
|--|--------------------|--|-------------------------------------|--|------------------------------|--------------------------|
| 1 Rate G-41 C&I Medium Annual / High Winter | | | | | | |
| 2 | Winter Usage | | | | | |
| 3 | First 1,000 Therms | 17,781,265 | 17,789,142 | 7,877 | 0.1979 | 1,559 |
| 4 | Over 1,000 Therms | 17,352,089 | 15,722,941 | (1,629,148) | 0.1572 | (256,102) |
| 5 | Summer Usage | | | | | |
| 6 | First 300 Therms | 2,731,934 | 2,742,440 | 10,506 | 0.1246 | 1,309 |
| 7 | Over 300 Therms | 2,388,799 | 2,381,956 | (6,843) | 0.0988 | (676) |
| 8 | Total | 40,254,087 | 38,636,479 | (1,617,608) | | (253,910) |
| 9 Rate G-51 C&I Medium Annual / Low Winter | | | | | | |
| 10 | Winter Usage | | | | | |
| 11 | First 700 Therms | 4,608,855 | 4,608,855 | 0 | 0.1708 | 0 |
| 12 | Over 700 Therms | 3,507,671 | 3,507,671 | 0 | 0.1315 | 0 |
| 13 | Summer Usage | | | | | |
| 14 | First 500 Therms | 3,120,285 | 3,120,285 | 0 | 0.1000 | 0 |
| 15 | Over 500 Therms | 2,482,096 | 2,482,096 | 0 | 0.0765 | 0 |
| 16 | Total | 13,718,907 | 13,718,907 | 0 | | 0 |
| 17 Rate G-42 C&I High Annual / High Winter | | | | | | |
| 18 | Winter Usage | | | | | |
| 19 | First 9,000 Therms | 10,603,254 | 10,546,755 | (56,499) | 0.1658 | (9,368) |
| 20 | Over 9,000 Therms | 4,613,770 | 4,052,965 | (560,805) | 0.1317 | (73,858) |
| 21 | Summer Usage | | | | | |
| 22 | First 2,200 Therms | 1,720,377 | 1,723,995 | 3,618 | 0.0687 | 249 |
| 23 | Over 2,200 Therms | 1,146,390 | 1,159,973 | 13,583 | 0.0573 | 778 |
| 24 | Total | 18,083,791 | 17,483,688 | (600,103) | | (82,199) |

Witness: J.A. Ferro
D.T.E. 05-27
Exhibit BSG/JAF-1
Sch JAF 1-5
Sheet 4 of 9

Bay State Gas Company
Normalized Volume and Revenue Adjustments
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) Therms (Sch JAF1-4) | Weather Normalized (2) Therms | Weather Normalized Adjustment (3=2-1) Therms | Base Rate (4) \$/Therm | Revenue (5=3x4) \$ |
|--|---------------------|---|----------------------------------|---|---------------------------|-----------------------|
| 1 Rate G-52 C&I High Annual / Low Winter | | | | | | |
| 2 | Winter Usage | | | | | |
| 3 | First 10,000 Therms | 3,147,730 | 3,147,730 | 0 | 0.1638 | 0 |
| 4 | Over 10,000 Therms | 656,853 | 656,853 | 0 | 0.1288 | 0 |
| 5 | Summer Usage | | | | | |
| 6 | First 8,000 Therms | 2,077,886 | 2,077,886 | 0 | 0.0712 | 0 |
| 7 | Over 8,000 Therms | 783,422 | 783,422 | 0 | 0.0569 | 0 |
| 8 | Total | 6,665,891 | 6,665,891 | 0 | | 0 |
| 9 Rate G-43 C&I Extra High Annual / High Winter | | | | | | |
| 10 | Winter Usage | | | | | |
| 11 | All Gas Consumed | 3,290,680 | 3,128,697 | (161,983) | 0.0389 | (6,301) |
| 12 | Summer Usage | | | | | |
| 13 | All Gas Consumed | 1,307,471 | 1,303,249 | (4,222) | 0.0170 | (72) |
| 14 | Total | 4,598,151 | 4,431,946 | (166,205) | | (6,373) |
| 15 Rate G-53 C&I Extra High Annual / Low Winter | | | | | | |
| 16 | Winter Usage | | | | | |
| 17 | All Gas Consumed | 2,286,988 | 2,286,988 | 0 | 0.0389 | 0 |
| 18 | Summer Usage | | | | | |
| 19 | All Gas Consumed | 867,009 | 867,009 | 0 | 0.0170 | 0 |
| 20 | Total | 3,153,997 | 3,153,997 | 0 | | 0 |

Bay State Gas Company
Normalized Volume and Revenue Adjustments
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) Therms (Sch JAF1-4-1) | Weather Normalized (2) Therms | Weather Normalized Adjustment (3=2-1) Therms | Base Rate (4) \$/Therm | Revenue (5=3x4) \$ |
|--|-------------------------------------|--|-------------------------------------|---|------------------------------|--------------------------|
| 1 Tariff Sales Summary by Customer Class | | | | | | |
| 2 | Total Residential Sales | 262,867,029 | 254,100,726 | (8,766,303) | | (1,714,352) |
| 3 | Total Commercial / Industrial Sales | <u>115,302,498</u> | <u>111,848,322</u> | <u>(3,454,176)</u> | | <u>(592,832)</u> |
| 4 | Total Tariff Sales | 378,169,527 | 365,949,048 | (12,220,479) | | (2,307,184) |
| 5 RESIDENTIAL TRANSPORTATION | | | | | | |
| 6 Rate T-1 Residential Non-Heating Choice Monthly | | | | | | |
| 7 | Winter Usage | | | | | |
| 8 | First 12 Therms | 306 | 306 | 0 | 0.4349 | 0 |
| 9 | Over 12 Therms | 721 | 721 | 0 | 0.3758 | 0 |
| 10 | Summer Usage | | | | | |
| 11 | First 10 Therms | 265 | 265 | 0 | 0.3848 | 0 |
| 12 | Over 10 Therms | <u>616</u> | <u>616</u> | <u>0</u> | 0.2965 | <u>0</u> |
| 13 | Total | 1,908 | 1,908 | 0 | | 0 |
| 14 Rate T-3 Residential Heating Choice | | | | | | |
| 15 | Winter Usage | | | | | |
| 16 | First 90 Therms | 18,125 | 18,105 | (20) | 0.4000 | (8) |
| 17 | Over 90 Therms | 47,174 | 44,795 | (2,379) | 0.2076 | (494) |
| 18 | Summer Usage | | | | | |
| 19 | First 30 Therms | 5,261 | 5,269 | 8 | 0.2317 | 2 |
| 20 | Over 30 Therms | <u>11,402</u> | <u>11,380</u> | <u>(22)</u> | 0.1639 | <u>(4)</u> |
| 21 | Total | 81,962 | 79,549 | (2,413) | | (504) |

Bay State Gas Company
Normalized Volume and Revenue Adjustments
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow | | Weather Normalized | | Weather Normalized Adjustment | | Base Rate | | Revenue | |
|---|------------------|---------------|---------------|--------------------|---------------|-------------------------------|-------------------|-----------------|-----------------|---------------|---------------|
| | | (1) Therms | (1) Therms | (2) Therms | (2) Therms | (3=2-1) Therms | (3=2-1) Therms | (4) \$/Therm | (4) \$/Therm | (5=3x4) \$ | (5=3x4) \$ |
| 1 Rate T-4 Residential Heating - Low Income Choice | | | | | | | | | | | |
| 2 Winter Usage | | | | | | | | | | | |
| 3 | First 90 Therms | 0 | 0 | 0 | 0 | 0 | 0 | 0.2247 | 0 | 0 | 0 |
| 4 | Over 90 Therms | 0 | 0 | 0 | 0 | 0 | 0 | 0.0709 | 0 | 0 | 0 |
| 5 Summer Usage | | | | | | | | | | | |
| 6 | First 30 Therms | 0 | 0 | 0 | 0 | 0 | 0 | 0.1243 | 0 | 0 | 0 |
| 7 | Over 30 Therms | 0 | 0 | 0 | 0 | 0 | 0 | 0.0700 | 0 | 0 | 0 |
| 8 | Total | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| 9 Rate T-40 C&I Low Annual / High Winter | | | | | | | | | | | |
| 10 Winter Usage | | | | | | | | | | | |
| 11 | First 125 Therms | 505,143 | 505,134 | 505,134 | 505,134 | (9) | (84,527) | 0.3694 | (3) | 0.3694 | (3) |
| 12 | Over 125 Therms | 1,200,520 | 1,115,993 | 1,115,993 | 1,115,993 | | | 0.2315 | | 0.2315 | (19,568) |
| 13 Summer Usage | | | | | | | | | | | |
| 14 | First 35 Therms | 89,607 | 89,954 | 89,954 | 89,954 | 347 | 347 | 0.3288 | 114 | 0.3288 | 114 |
| 15 | Over 35 Therms | 187,519 | 188,945 | 188,945 | 188,945 | 1,426 | 1,426 | 0.1855 | 265 | 0.1855 | 265 |
| 16 | Total | 1,982,789 | 1,900,026 | 1,900,026 | 1,900,026 | (82,763) | (82,763) | | | | (19,192) |
| 17 Rate T-50 C&I Low Annual / Low Winter | | | | | | | | | | | |
| 18 Winter Usage | | | | | | | | | | | |
| 19 | First 125 Therms | 155,589 | 155,589 | 155,589 | 155,589 | 0 | 0 | 0.3597 | 0 | 0.3597 | 0 |
| 20 | Over 125 Therms | 342,115 | 342,115 | 342,115 | 342,115 | 0 | 0 | 0.2268 | 0 | 0.2268 | 0 |
| 21 Summer Usage | | | | | | | | | | | |
| 22 | First 80 Therms | 98,920 | 98,920 | 98,920 | 98,920 | 0 | 0 | 0.3240 | 0 | 0.3240 | 0 |
| 23 | Over 80 Therms | 201,158 | 201,158 | 201,158 | 201,158 | 0 | 0 | 0.1884 | 0 | 0.1884 | 0 |
| 24 | Total | 797,782 | 797,782 | 797,782 | 797,782 | 0 | 0 | | | | 0 |

Bay State Gas Company
Normalized Volume and Revenue Adjustments
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) Therms (Sch JAF1-4-1) | Weather Normalized (2) Therms | Weather Normalized Adjustment (3=2-1) Therms | Base Rate (4) \$/Therm | Revenue (5=3x4) \$ |
|--|--------------------|--|-------------------------------------|--|------------------------------|--------------------------|
| 1 Rate T-41 C&I Medium Annual / High Winter | | | | | | |
| 2 | Winter Usage | | | | | |
| 3 | First 1,000 Therms | 5,564,341 | 5,568,728 | 4,387 | 0.1979 | 868 |
| 4 | Over 1,000 Therms | 8,050,459 | 7,439,176 | (611,283) | 0.1572 | (96,094) |
| 5 | Summer Usage | | | | | |
| 6 | First 300 Therms | 1,113,364 | 1,118,124 | 4,760 | 0.1246 | 593 |
| 7 | Over 300 Therms | 1,395,894 | 1,398,085 | 2,191 | 0.0988 | 216 |
| 8 | Total | 16,124,058 | 15,524,113 | (599,945) | | (94,417) |
| 9 Rate T-51 C&I Medium Annual / Low Winter | | | | | | |
| 10 | Winter Usage | | | | | |
| 11 | First 700 Therms | 1,960,146 | 1,960,146 | 0 | 0.1708 | 0 |
| 12 | Over 700 Therms | 2,664,232 | 2,664,232 | 0 | 0.1315 | 0 |
| 13 | Summer Usage | | | | | |
| 14 | First 500 Therms | 1,236,700 | 1,236,700 | 0 | 0.1000 | 0 |
| 15 | Over 500 Therms | 1,789,398 | 1,789,398 | 0 | 0.0765 | 0 |
| 16 | Total | 7,650,476 | 7,650,476 | 0 | | 0 |
| 17 Rate T-42 C&I High Annual / High Winter | | | | | | |
| 18 | Winter Usage | | | | | |
| 19 | First 9,000 Therms | 14,796,679 | 14,755,633 | (41,046) | 0.1658 | (6,805) |
| 20 | Over 9,000 Therms | 8,390,257 | 7,451,026 | (939,231) | 0.1317 | (123,697) |
| 21 | Summer Usage | | | | | |
| 22 | First 2,200 Therms | 2,470,526 | 2,478,355 | 7,829 | 0.0687 | 538 |
| 23 | Over 2,200 Therms | 1,927,198 | 1,966,704 | 39,506 | 0.0573 | 2,264 |
| 24 | Total | 27,584,660 | 26,651,718 | (932,942) | | (127,700) |

Bay State Gas Company
Normalized Volume and Revenue Adjustments
For the 12 Months Ending December 31, 2004

| Line No. | Description | Physical Flow (1) Therms (Sch JAF1-4-1) | Weather Normalized (2) Therms | Weather Normalized Adjustment (3=2-1) Therms | Base Rate (4) \$/Therm | Revenue (5=3x4) \$ |
|--|---------------------|--|-------------------------------------|--|------------------------------|--------------------------|
| 1 Rate T-52 C&I High Annual / Low Winter | | | | | | |
| 2 | Winter Usage | | | | | |
| 3 | First 10,000 Therms | 7,257,566 | 7,257,566 | 0 | 0.1638 | 0 |
| 4 | Over 10,000 Therms | 3,694,479 | 3,694,479 | 0 | 0.1288 | 0 |
| 5 | Summer Usage | | | | | |
| 6 | First 8,000 Therms | 5,128,242 | 5,128,242 | 0 | 0.0712 | 0 |
| 7 | Over 8,000 Therms | 2,759,090 | 2,759,090 | 0 | 0.0569 | 0 |
| 8 | Total | 18,839,377 | 18,839,377 | 0 | | 0 |
| 9 Rate T-43 C&I Extra High Annual / High Winter | | | | | | |
| 10 | Winter Usage | | | | | |
| 11 | All Gas Consumed | 4,265,315 | 4,082,507 | (182,808) | 0.0389 | (7,111) |
| 12 | Summer Usage | | | | | |
| 13 | All Gas Consumed | 922,614 | 953,578 | 30,964 | 0.0170 | 526 |
| 14 | Total | 5,187,929 | 5,036,085 | (151,844) | | (6,585) |
| 15 Rate T-53 C&I Extra High Annual / Low Winter | | | | | | |
| 16 | Winter Usage | | | | | |
| 17 | All Gas Consumed | 26,368,965 | 26,368,965 | 0 | 0.0389 | 0 |
| 18 | Summer Usage | | | | | |
| 19 | All Gas Consumed | 24,699,265 | 24,699,265 | 0 | 0.0170 | 0 |
| 20 | Total | 51,068,230 | 51,068,230 | 0 | | 0 |
| 21 | Special Contract | 116,214,683 | 116,214,683 | 0 | #DIV/0! | 0 |

Bay State Gas Company
Normalized Volume and Revenue Adjustments
For the 12 Months Ending December 31, 2004

| Line No. | <u>Description</u> | Physical Flow (1) Therms (Sch JAF1-4-1) | Weather Normalized (2) Therms | Weather Normalized Adjustment (3=2-1) Therms | Base Rate (4) \$/Therm | Revenue (5=3x4) \$ |
|---|-------------------------------------|--|-------------------------------------|--|------------------------------|--------------------------|
| 1 Transportation Summary by Customer Class | | | | | | |
| 2 | Total Residential Transportation | 83,870 | 81,457 | (2,413) | | (504) |
| 3 | Total Commercial / Industrial Trans | <u>245,449,984</u> | <u>243,682,490</u> | <u>(1,767,494)</u> | | <u>(247,894)</u> |
| 4 | Total Transportation | 245,533,854 | 243,763,947 | (1,769,907) | | (248,398) |
| 5 Total Company Throughput | | | | | | |
| | | 623,703,381 | 609,712,995 | (13,990,386) | | (2,555,582) |

Bay State Gas Billing Month Normalization of Volume for Weather
 Brockton Division
 2004

| | | 3=1/2 | | | | | 5=3-4 | | 6 | | 7 | | 8=4+5(7/6) | | 9=8x2 | | 10=7-6 | | 11=9-1 | |
|------------------|-----|----------------------|---------|--------------|-------------|-----------|-----------------|------------|----------------|-------------|-----------------------------|-------------|------------|--|-------|--|--------|--|--------|--|
| Residential Heat | | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | | | | | | | | | |
| | | Therms | Custs | Tb/Cus Total | Tb/Cus Base | Tb/Cus TS | EDD Actual | EDD Normal | Tb/Cus | Therms | EDD | Therms | | | | | | | | |
| RH | JAN | 21,489,007 | 110,366 | 203.8 | 23.6 | 180.1 | 1228 | 1197 | 199.2 | 21,987,111 | (31) | (501,895) | | | | | | | | |
| RH | FEB | 25,373,367 | 110,491 | 229.6 | 23.6 | 206.0 | 1360 | 1182 | 202.7 | 22,394,100 | (178) | (2,979,267) | | | | | | | | |
| RH | MAR | 18,003,493 | 110,533 | 162.9 | 23.6 | 139.3 | 919 | 992 | 173.9 | 19,226,150 | 73 | 1,222,657 | | | | | | | | |
| RH | APR | 15,501,967 | 109,601 | 141.4 | 23.6 | 117.8 | 826 | 777 | 134.5 | 14,735,967 | (49) | (766,000) | | | | | | | | |
| RH | MAY | 5,980,296 | 108,679 | 55.0 | 23.6 | 31.4 | 314 | 403 | 63.9 | 6,947,585 | 89 | 967,288 | | | | | | | | |
| RH | JUN | 4,123,080 | 108,520 | 38.0 | 23.6 | 14.4 | 195 | 160 | 35.4 | 3,843,220 | (35) | (279,860) | | | | | | | | |
| RH | JUL | 2,794,343 | 108,315 | 25.8 | 23.6 | - | - | - | 25.8 | 2,794,343 | - | - | | | | | | | | |
| RH | AUG | 2,490,092 | 108,276 | 23.0 | 23.0 | - | - | - | 23.0 | 2,490,092 | - | - | | | | | | | | |
| RH | SEP | 2,628,307 | 108,367 | 24.3 | 23.6 | 0.6 | 42 | 47 | 24.3 | 2,636,409 | 5 | 8,103 | | | | | | | | |
| RH | OCT | 4,137,034 | 108,845 | 38.0 | 23.6 | 14.4 | 248 | 247 | 38.0 | 4,130,722 | (1) | (6,312) | | | | | | | | |
| RH | NOV | 9,408,478 | 109,714 | 85.8 | 23.6 | 62.1 | 589 | 539 | 80.5 | 8,839,835 | (50) | (578,642) | | | | | | | | |
| RH | DEC | 15,232,414 | 109,193 | 139.5 | 23.6 | 115.9 | 892 | 919 | 143.0 | 15,615,398 | 27 | 382,984 | | | | | | | | |
| Annual | | 128,161,878 | | 1,167.1 | | | 6613 | 6463 | 1,144.2 | 125,630,932 | -150 | (2,530,946) | | | | | | | | |

NOTES: Col. 4 - Base Therms = the average of the 2 lowest months of Tb/Cus as shown in Col. 3, considering Jul-Sep. Jul and Aug are not normalized

| | | 3=1/2 | | | | | 5=3-4 | | 6 | | 7 | | 8=4+5(7/6) | | 9=1 | | 10=7-6 | | 11=9-1 | |
|----------------------|-----|----------------------|--------|--------------|-------------|-----------|-----------------|------------|----------------|--------|-----------------------------|--------|------------|--|-----|--|--------|--|--------|--|
| Residential Non-Heat | | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | | | | | | | | | |
| | | Therms | Custs | Tb/Cus Total | Tb/Cus Base | Tb/Cus TS | EDD Actual | EDD Normal | Tb/Cus | Therms | EDD | Therms | | | | | | | | |
| RNH | JAN | 236,708 | 12,322 | 19.2 | 11.4 | 11.4 | 1228 | 1197 | 236,708 | (31) | - | - | | | | | | | | |
| RNH | FEB | 237,409 | 12,301 | 19.3 | 11.4 | 11.4 | 1360 | 1182 | 237,409 | (178) | - | - | | | | | | | | |
| RNH | MAR | 218,357 | 12,265 | 17.8 | 11.4 | 11.4 | 919 | 992 | 218,357 | 73 | - | - | | | | | | | | |
| RNH | APR | 218,474 | 13,106 | 16.7 | 11.4 | 11.4 | 826 | 777 | 218,474 | (49) | - | - | | | | | | | | |
| RNH | MAY | 183,332 | 13,638 | 13.4 | 11.4 | 11.4 | 314 | 403 | 183,332 | 89 | - | - | | | | | | | | |
| RNH | JUN | 185,155 | 13,609 | 13.6 | 11.4 | 11.4 | 195 | 160 | 185,155 | (35) | - | - | | | | | | | | |
| RNH | JUL | 168,592 | 13,564 | 12.4 | 11.4 | 12.4 | - | - | 168,592 | - | - | - | | | | | | | | |
| RNH | AUG | 152,182 | 13,515 | 11.3 | 11.3 | 11.3 | - | - | 152,182 | - | - | - | | | | | | | | |
| RNH | SEP | 156,313 | 13,451 | 11.6 | 11.4 | 11.4 | 42 | 47 | 156,313 | 5 | - | - | | | | | | | | |
| RNH | OCT | 166,639 | 13,382 | 12.5 | 11.4 | 11.4 | 248 | 247 | 166,639 | (1) | - | - | | | | | | | | |
| RNH | NOV | 196,442 | 13,187 | 14.9 | 11.4 | 11.4 | 589 | 539 | 196,442 | (50) | - | - | | | | | | | | |
| RNH | DEC | 232,948 | 12,904 | 18.1 | 11.4 | 11.4 | 892 | 919 | 232,948 | 27 | - | - | | | | | | | | |
| Annual | | 2,352,552 | | 180.7 | | | 6613 | 6463 | 2,352,552 | -150 | 0 | 0 | | | | | | | | |

| | | 3=1/2 | | | | | 5=3-4 | | 6 | | 7 | | 8=4+5(7/6) | | 9=8x2 | | 10=7-6 | | 11=9-1 | |
|------------------|-----|----------------------|--------|--------------|-------------|-----------|-----------------|------------|----------------|------------|-----------------------------|-------------|------------|--|-------|--|--------|--|--------|--|
| C&I Heat Low/Med | | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | | | | | | | | | |
| | | Therms | Custs | Tb/Cus Total | Tb/Cus Base | Tb/Cus TS | EDD Actual | EDD Normal | Tb/Cus | Therms | EDD | Therms | | | | | | | | |
| GT 40, 41 | JAN | 8,555,069 | 12,338 | 693.4 | 41.2 | 652.1 | 1228 | 1197 | 676.9 | 8,351,949 | (31) | (203,120) | | | | | | | | |
| Hi Lo, Md | FEB | 10,417,234 | 12,365 | 842.5 | 41.2 | 801.2 | 1360 | 1182 | 737.6 | 9,120,554 | (178) | (1,296,680) | | | | | | | | |
| Hi Lo, Md | MAR | 7,217,903 | 12,332 | 585.3 | 41.2 | 544.1 | 919 | 992 | 628.5 | 7,750,846 | 73 | 532,944 | | | | | | | | |
| Hi Lo, Md | APR | 5,787,739 | 12,280 | 471.3 | 41.2 | 430.1 | 826 | 777 | 445.8 | 5,474,446 | (49) | (313,293) | | | | | | | | |
| Hi Lo, Md | MAY | 1,837,820 | 12,177 | 150.9 | 41.2 | 109.7 | 314 | 403 | 182.0 | 2,216,370 | 89 | 378,550 | | | | | | | | |
| Hi Lo, Md | JUN | 1,010,820 | 12,140 | 83.3 | 41.2 | 42.0 | 195 | 160 | 75.7 | 919,266 | (35) | (91,554) | | | | | | | | |
| Hi Lo, Md | JUL | 612,283 | 12,060 | 50.8 | 41.2 | - | - | - | 50.8 | 612,283 | - | - | | | | | | | | |
| Hi Lo, Md | AUG | 470,773 | 12,019 | 39.2 | 39.2 | - | - | - | 39.2 | 470,773 | - | - | | | | | | | | |
| Hi Lo, Md | SEP | 521,149 | 12,029 | 43.3 | 41.2 | 2.1 | 42 | 47 | 43.6 | 524,124 | 5 | 2,975 | | | | | | | | |
| Hi Lo, Md | OCT | 1,017,777 | 11,834 | 86.0 | 41.2 | 44.8 | 248 | 247 | 85.8 | 1,015,641 | (1) | (2,136) | | | | | | | | |
| Hi Lo, Md | NOV | 2,776,142 | 12,061 | 230.2 | 41.2 | 188.9 | 589 | 539 | 214.1 | 2,582,706 | (50) | (193,435) | | | | | | | | |
| Hi Lo, Md | DEC | 5,239,263 | 11,999 | 436.6 | 41.2 | 395.4 | 892 | 919 | 448.6 | 5,382,870 | 27 | 143,607 | | | | | | | | |
| Annual | | 45,463,971 | | 3,712.8 | | | 6613 | 6463 | 3,628.7 | 44,421,828 | -150 | (1,042,142) | | | | | | | | |

Bay State Gas Billing Month Normalization of Volume for Weather
Brockton Division
2004

13=Annual 12 Allocated by 22
14=1-12 15=14/6 15a 15b 15c= 15d= 15e= 15f= 16 = 15c - 15d 17=1+16 18=2 19=17/18 20=13/18 21=19-20

Columns carry over from Sheet 1.

| Residential Heat | | Billing Month | | Unbilled | | | | | Actual Calendar Month | | | | | | | |
|------------------|-----|---------------------|----------------------|------------|-----------|--------------|----------------|---------------------|------------------------|------------------------|-------------|-----------|--------------|-------------|-----------|-----|
| | | Billing Thermo Base | Calendar Thermo Base | Thermo TS | TS Th/EDD | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Thermo | Thermo | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | |
| RH | JAN | 2,607,473 | 2,637,392 | 19,881,533 | 16,190 | 802 | 449 | 13,423,440 | 7269388 | 6,154,052 | 28,672,977 | 110,366 | 259.8 | 23.9 | 235.9 | |
| RH | FEB | 2,610,427 | 2,467,238 | 22,762,940 | 16,737 | 478 | 802 | 8,005,889 | 13,423,440 | (5,417,551) | 19,812,627 | 110,491 | 179.3 | 22.3 | 157.0 | |
| RH | MAR | 2,611,419 | 2,637,392 | 15,392,075 | 16,749 | 489 | 478 | 7,644,365 | 8005889 | (361,524) | 17,667,943 | 110,533 | 159.8 | 23.9 | 136.0 | |
| RH | APR | 2,589,400 | 2,552,315 | 12,912,567 | 15,633 | 207 | 489 | 2,249,760 | 7644365 | (5,394,605) | 10,070,278 | 109,601 | 91.9 | 23.3 | 68.6 | |
| RH | MAY | 2,567,617 | 2,637,392 | 3,412,680 | 10,868 | 122 | 207 | 975,512 | 2249760 | (1,274,248) | 4,775,824 | 108,679 | 43.9 | 24.3 | 19.7 | |
| RH | JUN | 2,563,860 | 2,552,315 | 1,559,220 | 7,996 | 10 | 122 | - | - | 975,512 | (975,512) | 3,136,023 | 108,520 | 28.9 | 23.5 | 5.4 |
| RH | JUL | 2,794,343 | 2,637,392 | - | 0 | 0 | 10 | 0 | 0 | 0 | 2,637,392 | 108,315 | 24.3 | 24.3 | 0.0 | |
| RH | AUG | 2,490,092 | 2,637,392 | - | 3 | 0 | 0 | 4,862 | 0 | 4,862 | 2,642,254 | 108,276 | 24.4 | 24.4 | 0.0 | |
| RH | SEP | 2,560,246 | 2,552,315 | 68,061 | 1,621 | 49 | 3 | 309,312 | 4862 | 304,450 | 2,924,826 | 108,367 | 27.0 | 23.6 | 3.4 | |
| RH | OCT | 2,571,539 | 2,637,392 | 1,565,495 | 6,312 | 242 | 49 | 2,800,630 | 309312 | 2,491,318 | 6,694,206 | 108,845 | 61.5 | 24.2 | 37.3 | |
| RH | NOV | 2,592,069 | 2,552,315 | 6,816,408 | 11,573 | 371 | 242 | 5,262,483 | 2800630 | 2,461,853 | 11,830,376 | 109,714 | 107.8 | 23.3 | 84.6 | |
| RH | DEC | 2,579,760 | 2,637,392 | 12,652,654 | 14,185 | 551 | 371 | 8,920,786 | 5262483 | 3,658,303 | 18,948,349 | 109,193 | 173.5 | 24.2 | 149.4 | |
| Annual | | 31,138,244 | | | | | | | | 1,651,398 | 129,813,275 | | 1,182.3 | | | |

13=Annual 12 Allocated by 22 15=Annual 14 Allocated by 25
14=1-12 15a 15b 15c= 15d= 15e= 15f= 16 = 15c - 15d 17=13+15 18=2 19=17/18 20=13/18 21=19-20

| Residential Non-Heat | | Billing Month | | Unbilled | | | | | Actual Calendar Month | | | | | | |
|----------------------|-----|---------------------|----------------------|-------------------|-----------|--------------|----------------|---------------------|------------------------|------------------------|------------|--------|--------------|-------------|-----------|
| | | Billing Thermo Base | Calendar Thermo Base | Thermo above base | TS Th/EDD | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Thermo | Thermo | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS |
| RNH | JAN | 140,971 | 153,301 | 95,737 | 104,446 | 802 | 449 | 5,842,345 | 2,941,962 | 2,900,384 | 11,462,946 | 12,338 | 929.1 | 41.9 | 887.2 |
| RNH | FEB | 140,731 | 143,410 | 96,678 | 89,562 | 478 | 802 | 3,489,685 | 5,842,345 | (2,352,660) | 8,037,639 | 12,365 | 650.0 | 39.1 | 611.0 |
| RNH | MAR | 140,319 | 153,301 | 78,038 | 77,637 | 478 | 478 | 3,126,539 | 3,489,685 | (363,146) | 6,862,498 | 12,332 | 556.5 | 41.9 | 514.6 |
| RNH | APR | 149,940 | 148,356 | 68,534 | 48,206 | 207 | 489 | 880,448 | 3,126,539 | (2,246,091) | 3,534,876 | 12,280 | 287.9 | 40.7 | 247.2 |
| RNH | MAY | 156,027 | 153,301 | 27,305 | 22,834 | 122 | 207 | 319,130 | 880,448 | (561,318) | 1,290,636 | 12,177 | 106.0 | 42.4 | 63.6 |
| RNH | JUN | 155,695 | 148,356 | 29,460 | 4,990 | 10 | 122 | - | 319,130 | (319,130) | 690,692 | 12,140 | 56.9 | 41.2 | 15.7 |
| RNH | JUL | 168,592 | 153,301 | - | - | 0 | 10 | 0 | 0 | 0 | 516,396 | 12,060 | 42.8 | 42.8 | - |
| RNH | AUG | 152,182 | 153,301 | - | - | 3 | 0 | 1,785 | 0 | 1,785 | 518,181 | 12,019 | 43.1 | 43.0 | 0.1 |
| RNH | SEP | 153,887 | 148,356 | 2,426 | 9,472 | 49 | 3 | 104,651 | 1,785 | 102,866 | 627,596 | 12,029 | 52.2 | 41.5 | 10.6 |
| RNH | OCT | 153,098 | 153,301 | 13,541 | 35,520 | 242 | 49 | 936,226 | 104,651 | 831,574 | 1,877,633 | 11,834 | 158.7 | 43.6 | 115.0 |
| RNH | NOV | 150,867 | 148,356 | 45,575 | 59,877 | 371 | 242 | 1,973,264 | 936,226 | 1,037,038 | 3,815,441 | 12,061 | 316.3 | 41.4 | 274.9 |
| RNH | DEC | 147,629 | 153,301 | 85,319 | 90,069 | 551 | 371 | 3,610,291 | 1,973,264 | 1,637,027 | 6,897,767 | 11,999 | 574.9 | 43.0 | 531.8 |
| Annual | | 1,809,938 | | 542,614 | | | | | | 668,330 | 46,132,300 | | 3,774.3 | | |

13=Annual 12 Allocated by 22
14=1-12 15=14/6 15a 15b 15c= 15d= 15e= 15f= 16 = 15c - 15d 17=1+16 18=2 19=17/18 20=13/18 21=19-20

| C&I Heat Low/Med G/T 40, 41 | | Billing Month | | Unbilled | | | | | Actual Calendar Month | | | | | | |
|--------------------------------|-----|---------------------|----------------------|-----------|-----------|--------------|----------------|---------------------|------------------------|------------------------|------------|--------|--------------|-------------|-----------|
| | | Billing Thermo Base | Calendar Thermo Base | Thermo TS | TS Th/EDD | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Thermo | Thermo | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS |
| Hi Lo, Md | JAN | 508,902 | 516,396 | 8,046,167 | 6,552 | 802 | 449 | 5,842,345 | 2,941,962 | 2,900,384 | 11,462,946 | 12,338 | 929.1 | 41.9 | 887.2 |
| Hi Lo, Md | FEB | 510,016 | 483,080 | 9,907,219 | 7,285 | 478 | 802 | 3,489,685 | 5,842,345 | (2,352,660) | 8,037,639 | 12,365 | 650.0 | 39.1 | 611.0 |
| Hi Lo, Md | MAR | 508,654 | 516,396 | 6,709,248 | 7,301 | 489 | 478 | 3,126,539 | 3,489,685 | (363,146) | 6,862,498 | 12,332 | 556.5 | 41.9 | 514.6 |
| Hi Lo, Md | APR | 506,510 | 499,738 | 5,281,230 | 6,394 | 207 | 489 | 880,448 | 3,126,539 | (2,246,091) | 3,534,876 | 12,280 | 287.9 | 40.7 | 247.2 |
| Hi Lo, Md | MAY | 502,261 | 516,396 | 1,335,558 | 4,253 | 122 | 207 | 319,130 | 880,448 | (561,318) | 1,290,636 | 12,177 | 106.0 | 42.4 | 63.6 |
| Hi Lo, Md | JUN | 500,735 | 499,738 | 510,085 | 2,616 | 10 | 122 | - | 319,130 | (319,130) | 690,692 | 12,140 | 56.9 | 41.2 | 15.7 |
| Hi Lo, Md | JUL | 612,283 | 516,396 | - | - | 0 | 10 | 0 | 0 | 0 | 516,396 | 12,060 | 42.8 | 42.8 | - |
| Hi Lo, Md | AUG | 470,773 | 516,396 | - | - | 3 | 0 | 1,785 | 0 | 1,785 | 518,181 | 12,019 | 43.1 | 43.0 | 0.1 |
| Hi Lo, Md | SEP | 496,157 | 499,738 | 24,992 | 595 | 49 | 3 | 104,651 | 1,785 | 102,866 | 627,596 | 12,029 | 52.2 | 41.5 | 10.6 |
| Hi Lo, Md | OCT | 488,114 | 516,396 | 529,663 | 2,136 | 242 | 49 | 936,226 | 104,651 | 831,574 | 1,877,633 | 11,834 | 158.7 | 43.6 | 115.0 |
| Hi Lo, Md | NOV | 497,477 | 499,738 | 2,278,665 | 3,869 | 371 | 242 | 1,973,264 | 936,226 | 1,037,038 | 3,815,441 | 12,061 | 316.3 | 41.4 | 274.9 |
| Hi Lo, Md | DEC | 494,919 | 516,396 | 4,744,344 | 5,319 | 551 | 371 | 3,610,291 | 1,973,264 | 1,637,027 | 6,897,767 | 11,999 | 574.9 | 43.0 | 531.8 |
| Annual | | 6,096,800 | | | | | | | | 668,330 | 46,132,300 | | 3,774.3 | | |

Bay State Gas Billing Month Normalization of Volume for Weather
Brockton Division
2004

Columns carry over from Sheet 1 & 2.

| | | 22 | 23 | 24 | 25 | 26=20+ 21*(25/24) | 27=18*26 | 28=25-24 | 29=27-17 | 30= ((20*(23/22))-20)*18 | 31=29+30 |
|------------------|-----|------------------|--------------|---------------|---------------|----------------------|-------------|-----------------|----------------------|-----------------------------|---------------------|
| Residential Heat | | Weather Calendar | | | | Normal Calendar | | Normal v Actual | | | |
| | | 2004 Days | 2005 Days | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj |
| RH | JAN | 31.00 | 31.00 | 1547 | 1235 | 212.2 | 23,422,103 | -312 | (5,250,874) | - | (5,250,874) |
| RH | FEB | 29.00 | 28.25 | 1040 | 1059 | 182.2 | 20,139,514 | 19 | 316,887 | (63,808) | 253,079 |
| RH | MAR | 31.00 | 31.00 | 913 | 918 | 160.6 | 17,750,257 | 5 | 82,314 | - | 82,314 |
| RH | APR | 30.00 | 30.00 | 535 | 570 | 96.4 | 10,562,107 | 35 | 491,829 | - | 491,829 |
| RH | MAY | 31.00 | 31.00 | 244 | 270 | 46.0 | 5,003,689 | 26 | 227,866 | - | 227,866 |
| RH | JUN | 30.00 | 30.00 | 74 | 59 | 27.8 | 3,017,704 | -15 | (118,319) | - | (118,319) |
| RH | JUL | 31.00 | 31.00 | - | - | 24.3 | 2,637,392 | - | - | - | (4,862) |
| RH | AUG | 31.00 | 31.00 | - | - | 24.4 | 2,637,392 | - | (4,862) | - | - |
| RH | SEP | 30.00 | 30.00 | 100 | 112 | 27.4 | 2,969,528 | 12 | 44,701 | - | 44,701 |
| RH | OCT | 31.00 | 31.00 | 449 | 420 | 59.1 | 6,432,184 | -29 | (262,021) | - | (262,021) |
| RH | NOV | 30.00 | 30.00 | 720 | 708 | 106.4 | 11,675,939 | -12 | (154,638) | - | (154,638) |
| RH | DEC | 31.00 | 31.00 | 1077 | 1065 | 171.9 | 18,766,611 | -12 | (181,738) | - | (181,738) |
| | | 366.00 | 365.25 | 6699 | 6416 | 1,138.7 | 125,004,421 | -283 | (4,808,854) | (63,808) | (4,872,662) |

| | | 22 | 23 | 24 | 25 | 26=20+ 21*(25/24) | 27=17 | 28=25-24 | 29=27-17 | 30= ((19*(23/22))-19)*18 | 31=29+30 |
|----------------------|-----|------------------|--------------|---------------|---------------|----------------------|-----------|-----------------|----------------------|-----------------------------|---------------------|
| Residential Non-Heat | | Weather Calendar | | | | Normal Calendar | | Normal v Actual | | | |
| | | 2004 Days | 2005 Days | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj |
| RNH | JAN | 31.00 | 31.00 | 1547 | 1235 | - | 257,747 | -312 | - | - | - |
| RNH | FEB | 29.00 | 28.25 | 1040 | 1059 | - | 232,972 | 19 | - | (6,025) | (6,025) |
| RNH | MAR | 31.00 | 31.00 | 913 | 918 | - | 230,938 | 5 | - | - | - |
| RNH | APR | 30.00 | 30.00 | 535 | 570 | - | 196,562 | 35 | - | - | - |
| RNH | MAY | 31.00 | 31.00 | 244 | 270 | - | 176,135 | 26 | - | - | - |
| RNH | JUN | 30.00 | 30.00 | 74 | 59 | - | 153,345 | -15 | - | - | - |
| RNH | JUL | 31.00 | 31.00 | - | - | - | 153,301 | - | - | - | - |
| RNH | AUG | 31.00 | 31.00 | - | - | - | 153,301 | - | - | - | - |
| RNH | SEP | 30.00 | 30.00 | 100 | 112 | - | 157,828 | 12 | - | - | - |
| RNH | OCT | 31.00 | 31.00 | 449 | 420 | - | 188,821 | -29 | - | - | - |
| RNH | NOV | 30.00 | 30.00 | 720 | 708 | - | 208,233 | -12 | - | - | - |
| RNH | DEC | 31.00 | 31.00 | 1077 | 1065 | - | 243,370 | -12 | - | - | - |
| | | 366.00 | 365.25 | 6699 | 6416 | - | 2,352,552 | -283 | - | (6,025) | (6,025) |

| | | 22 | 23 | 24 | 25 | 26=20+ 21*(25/24) | 27=18*26 | 28=25-24 | 29=27-17 | 30= ((20*(23/22))-20)*18 | 31=29+30 |
|------------------|-----|------------------|--------------|---------------|---------------|----------------------|------------|-----------------|----------------------|-----------------------------|---------------------|
| C&I Heat Low/Med | | Weather Calendar | | | | Normal Calendar | | Normal v Actual | | | |
| | | 2004 Days | 2005 Days | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj |
| C/I 40, 41 | | | | | | | | | | | |
| Hi Lo, Md | JAN | 31.00 | 31.00 | 1547 | 1235 | 750.1 | 9,255,238 | -312 | (2,207,708) | - | (2,207,708) |
| Hi Lo, Md | FEB | 29.00 | 28.25 | 1040 | 1059 | 661.2 | 8,175,655 | 19 | 138,016 | (12,493) | 125,523 |
| Hi Lo, Md | MAR | 31.00 | 31.00 | 913 | 918 | 559.3 | 6,897,252 | 5 | 34,754 | - | 34,754 |
| Hi Lo, Md | APR | 30.00 | 30.00 | 535 | 570 | 304.0 | 3,733,436 | 35 | 198,560 | - | 198,560 |
| Hi Lo, Md | MAY | 31.00 | 31.00 | 244 | 270 | 112.8 | 1,373,137 | 26 | 82,501 | - | 82,501 |
| Hi Lo, Md | JUN | 30.00 | 30.00 | 74 | 59 | 53.7 | 651,985 | -15 | (38,707) | - | (38,707) |
| Hi Lo, Md | JUL | 31.00 | 31.00 | - | - | 42.8 | 516,396 | - | - | - | - |
| Hi Lo, Md | AUG | 31.00 | 31.00 | - | - | 43.0 | 516,396 | - | (1,785) | - | (1,785) |
| Hi Lo, Md | SEP | 30.00 | 30.00 | 100 | 112 | 53.4 | 642,939 | 12 | 15,343 | - | 15,343 |
| Hi Lo, Md | OCT | 31.00 | 31.00 | 449 | 420 | 151.2 | 1,789,714 | -29 | (87,920) | - | (87,920) |
| Hi Lo, Md | NOV | 30.00 | 30.00 | 720 | 708 | 311.8 | 3,760,179 | -12 | (55,262) | - | (55,262) |
| Hi Lo, Md | DEC | 31.00 | 31.00 | 1077 | 1065 | 568.9 | 6,826,665 | -12 | (71,102) | - | (71,102) |
| | | 366.00 | 365.25 | 6699 | 6416 | 3,612.3 | 44,138,992 | -283 | (1,993,308) | (12,493) | (2,005,802) |

Bay State Gas Billing Month Normalization of Volume for Weather
Brockton Division
2004

| C&I Non Ht Low/Med G/T 50, 51 | | Actual Billing Month | | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|----------------------------------|-----|----------------------|-------|-----------------|----------------|--------------|---------------|-----------------|--------|----------------|-----|-----------------------------|--|
| | | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms | |
| | | | | | | | | | | | | | |
| NH Lo, Md | JAN | 1,499,603 | 2,523 | 594.4 | 320.6 | 1228 | 1197 | 1,499,603 | (31) | (178) | - | - | |
| NH Lo, Md | FEB | 1,778,694 | 2,527 | 703.9 | 320.6 | 1360 | 1182 | 1,778,694 | (178) | (73) | - | - | |
| NH Lo, Md | MAR | 1,445,991 | 2,525 | 572.7 | 320.6 | 919 | 992 | 1,445,991 | (49) | (49) | - | - | |
| NH Lo, Md | APR | 1,308,906 | 2,519 | 519.6 | 320.6 | 826 | 777 | 1,308,906 | (89) | (35) | - | - | |
| NH Lo, Md | MAY | 973,196 | 2,497 | 389.7 | 320.6 | 314 | 403 | 973,196 | (89) | (35) | - | - | |
| NH Lo, Md | JUN | 921,985 | 2,491 | 370.1 | 320.6 | 195 | 160 | 921,985 | (89) | (35) | - | - | |
| NH Lo, Md | JUL | 856,278 | 2,490 | 343.9 | 320.6 | | | 856,278 | | | - | - | |
| NH Lo, Md | AUG | 777,904 | 2,486 | 312.9 | 320.6 | | | 777,904 | | | - | - | |
| NH Lo, Md | SEP | 813,381 | 2,478 | 328.2 | 320.6 | 42 | 47 | 813,381 | 5 | (1) | - | - | |
| NH Lo, Md | OCT | 849,778 | 2,814 | 302.0 | 320.6 | 248 | 247 | 849,778 | (1) | (50) | - | - | |
| NH Lo, Md | NOV | 1,200,029 | 2,852 | 420.8 | 320.6 | 589 | 539 | 1,200,029 | (50) | (27) | - | - | |
| NH Lo, Md | DEC | 1,510,320 | 2,793 | 540.8 | 320.6 | 892 | 919 | 1,510,320 | 27 | (150) | - | - | |
| Annual | | 13,936,064 | | 5,398.9 | | 6613 | 6463 | 13,936,064 | -150 | 0 | | | |

NOTES: Col. 4 - Base Therms = the average of the 2 lowest months of Th/Cus as shown in Col. 3, considering Jul-Sep.
Jul and Aug are not normalized

| C&I Heat LG & XLG G/T 42, 43 | | Actual Billing Month | | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|---------------------------------|-----|----------------------|-------|-----------------|----------------|--------------|---------------|-----------------|------------|----------------|-----------|-----------------------------|--|
| | | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms | |
| | | | | | | | | | | | | | |
| H LG, XLG | JAN | 4,981,064 | 353 | 14,110.7 | 1,416.7 | 12,693.9 | 1228 | 1197 | 13,790.2 | 4,867,945 | (31) | (113,119) | |
| H LG, XLG | FEB | 5,667,672 | 352 | 16,101.3 | 1,416.7 | 14,684.6 | 1360 | 1182 | 14,179.4 | 4,991,143 | (178) | (676,529) | |
| H LG, XLG | MAR | 4,023,265 | 351 | 11,462.3 | 1,416.7 | 10,045.6 | 919 | 992 | 12,260.3 | 4,303,349 | 73 | 280,084 | |
| H LG, XLG | APR | 3,562,981 | 351 | 10,150.9 | 1,416.7 | 8,734.2 | 826 | 777 | 9,632.8 | 3,381,117 | (49) | (181,864) | |
| H LG, XLG | MAY | 1,557,034 | 351 | 4,436.0 | 1,416.7 | 3,019.3 | 314 | 403 | 5,291.8 | 1,857,413 | 89 | 300,379 | |
| H LG, XLG | JUN | 847,880 | 350 | 2,422.5 | 1,416.7 | 1,005.8 | 195 | 160 | 2,242.0 | 784,696 | (35) | (63,184) | |
| H LG, XLG | JUL | 528,827 | 350 | 1,510.9 | 1,416.7 | | | 1,510.9 | 528,827 | | | | |
| H LG, XLG | AUG | 461,557 | 349 | 1,322.5 | 1,416.7 | | | 1,322.5 | 461,557 | | | | |
| H LG, XLG | SEP | 547,254 | 349 | 1,568.0 | 1,416.7 | 151.3 | 42 | 47 | 1,586.0 | 553,519 | 5 | 6,285 | |
| H LG, XLG | OCT | 852,126 | 300 | 2,840.4 | 1,416.7 | 1,423.7 | 248 | 247 | 2,834.7 | 850,404 | (1) | (1,722) | |
| H LG, XLG | NOV | 1,598,321 | 300 | 5,327.7 | 1,416.7 | 3,911.0 | 589 | 539 | 4,995.7 | 1,498,720 | (50) | (99,601) | |
| H LG, XLG | DEC | 2,569,503 | 298 | 8,622.5 | 1,416.7 | 7,205.8 | 892 | 919 | 8,840.6 | 2,634,500 | 27 | 64,997 | |
| Annual | | 27,197,464 | | 79,875.9 | | 6613 | 6463 | 78,486.9 | 26,713,190 | -150 | (484,274) | | |

| C&I Non-Ht LG & XLG G/T 52, 53 | | Actual Billing Month | | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|-----------------------------------|-----|----------------------|-------|-----------------|----------------|--------------|---------------|-----------------|-----------|----------------|-------|-----------------------------|--|
| | | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms | |
| | | | | | | | | | | | | | |
| NH LG, XLG | JAN | 2,434,351 | 131 | 18,582.8 | 12,108.2 | 12,108.2 | 1228 | 1197 | 2,434,351 | (31) | (178) | - | |
| NH LG, XLG | FEB | 2,411,314 | 131 | 18,407.0 | 12,108.2 | 12,108.2 | 1360 | 1182 | 2,411,314 | (178) | (73) | - | |
| NH LG, XLG | MAR | 2,180,754 | 131 | 16,647.0 | 12,108.2 | 12,108.2 | 919 | 992 | 2,180,754 | (49) | (49) | - | |
| NH LG, XLG | APR | 2,160,173 | 130 | 16,616.7 | 12,108.2 | 12,108.2 | 826 | 777 | 2,160,173 | (89) | (35) | - | |
| NH LG, XLG | MAY | 1,693,088 | 129 | 13,124.7 | 12,108.2 | 12,108.2 | 314 | 403 | 1,693,088 | (89) | (35) | - | |
| NH LG, XLG | JUN | 1,650,888 | 130 | 12,699.1 | 12,108.2 | 12,108.2 | 195 | 160 | 1,650,888 | (89) | (35) | - | |
| NH LG, XLG | JUL | 1,584,455 | 129 | 12,282.6 | 12,282.6 | | | 1,584,455 | | | - | - | |
| NH LG, XLG | AUG | 1,539,460 | 129 | 11,933.8 | 11,933.8 | | | 1,539,460 | | | - | - | |
| NH LG, XLG | SEP | 1,586,747 | 129 | 12,300.4 | 12,108.2 | | 42 | 47 | 1,586,747 | 5 | (1) | - | |
| NH LG, XLG | OCT | 1,574,042 | 164 | 9,597.8 | 9,597.8 | | 248 | 247 | 1,574,042 | (1) | (50) | - | |
| NH LG, XLG | NOV | 2,337,073 | 167 | 13,994.4 | 12,108.2 | | 589 | 539 | 2,337,073 | (50) | (27) | - | |
| NH LG, XLG | DEC | 2,823,851 | 167 | 16,909.3 | 12,108.2 | | 892 | 919 | 2,823,851 | 27 | (150) | - | |
| Annual | | 23,976,196 | | 173,095.7 | | 6613 | 6463 | 23,976,196 | -150 | 0 | | | |

| Total | | Actual Billing Month | | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|--------|--|----------------------|---------|-----------------|----------------|--------------|---------------|-----------------|-------------|----------------|-----|-----------------------------|--|
| | | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms | |
| | | | | | | | | | | | | | |
| JAN | | 40,195,801 | 138,033 | | | | | | 39,377,667 | | | | |
| FEB | | 45,883,690 | 138,167 | | | | | | 40,933,214 | | | | |
| MAR | | 33,089,763 | 138,137 | | | | | | 35,125,447 | | | | |
| APR | | 28,540,241 | 137,987 | | | | | | 27,279,084 | | | | |
| MAY | | 12,224,766 | 137,471 | | | | | | 13,870,983 | | | | |
| JUN | | 8,739,808 | 137,240 | | | | | | 8,305,210 | | | | |
| JUL | | 6,544,778 | 136,908 | | | | | | 6,544,778 | | | | |
| AUG | | 5,891,968 | 136,774 | | | | | | 5,891,968 | | | | |
| SEP | | 6,253,130 | 136,803 | | | | | | 6,270,493 | | | | |
| OCT | | 8,597,396 | 137,339 | | | | | | 8,587,226 | | | | |
| NOV | | 17,516,484 | 138,281 | | | | | | 16,644,805 | | | | |
| DEC | | 27,608,299 | 137,354 | | | | | | 28,199,887 | | | | |
| Annual | | 241,088,124 | | | | | | | 237,030,762 | | | | |

Bay State Gas Billing Month Normalization of Volume for Weather
 Brockton Division
 2004

Witness: J.A. Ferro
 D.T.E. 05-27
 Exhibit BSG/JAF-1
 Schedule JAF-1-6
 Page 2
 Sheet 2

Columns carry over from Sheet 1.

| | | 13=Annual 12 Allocated by | | 15=Annual 14 Allocated by | | Unbilled | | | | | Actual Calendar Month | | | | |
|----------------------------------|-----|------------------------------|----------------------------|---------------------------------|----------------------------------|-----------------|-------------------|------------------------|---------------------------|---------------------------|-----------------------|----------|-----------------|----------------|--------------|
| | | 12=4*2 22 | 14=1-12 | 25 | 15a | 15b | 15a * 15 next | 15b * 15 | 16 = 15c - 15d | 17=13+15 | 18=2 | 19=17/18 | 20=13/18 | 21=19-20 | |
| C&I Non Ht Low/Med G/T 50, 51 | | Billing Therms Base | Calendar Therms Base | Billing Therms above base | Calendar Therms above base | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS |
| NH Lo, Md | JAN | 808,817 | 840,469 | 690,786 | 772,473 | | | | | | 1,612,942 | 2,523 | 639.3 | | |
| NH Lo, Md | FEB | 810,099 | 786,245 | 968,595 | 662,388 | | | | | | 1,448,635 | 2,527 | 573.3 | | |
| NH Lo, Md | MAR | 809,458 | 840,469 | 636,533 | 574,194 | | | | | | 1,414,664 | 2,525 | 560.3 | | |
| NH Lo, Md | APR | 807,535 | 813,357 | 501,372 | 356,526 | | | | | | 1,009,883 | 2,519 | 464.4 | | |
| NH Lo, Md | MAY | 800,482 | 840,469 | 172,714 | 168,881 | | | | | | 850,261 | 2,491 | 341.3 | | |
| NH Lo, Md | JUN | 798,558 | 813,357 | 123,427 | 36,904 | | | | | | 840,469 | 2,490 | 337.5 | | |
| NH Lo, Md | JUL | 856,278 | 840,469 | - | - | | | | | | 840,469 | 2,486 | 338.1 | | |
| NH Lo, Md | AUG | 777,904 | 840,469 | - | - | | | | | | 883,412 | 2,478 | 356.5 | | |
| NH Lo, Md | SEP | 794,391 | 813,357 | 18,990 | 70,054 | | | | | | 1,103,172 | 2,814 | 392.0 | | |
| NH Lo, Md | OCT | 849,778 | 840,469 | - | 262,703 | | | | | | 1,256,200 | 2,852 | 440.5 | | |
| NH Lo, Md | NOV | 914,287 | 813,357 | 285,742 | 442,843 | | | | | | 1,506,610 | 2,793 | 539.4 | | |
| NH Lo, Md | DEC | 895,373 | 840,469 | 614,947 | 666,140 | | | | | | 13,936,064 | | | | |
| Annual | | 9,922,959 | | 4,013,105 | | | | | | | | | | | |

| | | 13=Annual 12 Allocated by | | 15=Annual 14 | | Unbilled | | | | | Actual Calendar Month | | | | |
|---------------------------------|-----|------------------------------|----------------------------|---------------------------------|----------------------------------|-----------------|-------------------|------------------------|---------------------------|---------------------------|-----------------------|----------|-----------------|----------------|--------------|
| | | 12=4*2 22 | 14=1-12 | 15=14/6 | 15a | 15b | 15a * 15 next | 15b * 15 | 16 = 15c - 15d | 17=1+16 | 18=2 | 19=17/18 | 20=13/18 | 21=19-20 | |
| C&I Heat LG & XLG G/T 42, 43 | | Billing Therms Base | Calendar Therms Base | Billing Therms above base | Calendar Therms above base | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS |
| H.L.G. XLG | JAN | 500,103 | 486,471 | 4,480,960 | 3,649 | 802 | 449 | 3,048,181 | 1,638,397 | 1,409,784 | 6,377,215 | 353 | 18,065.8 | 1,378.1 | 16,687.7 |
| H.L.G. XLG | FEB | 498,587 | 455,085 | 5,168,985 | 3,801 | 478 | 802 | 1,833,978 | 3,048,181 | (1,214,203) | 4,409,867 | 352 | 12,528.0 | 1,292.9 | 11,235.2 |
| H.L.G. XLG | MAR | 497,270 | 486,471 | 3,525,995 | 3,837 | 489 | 478 | 1,814,931 | 1,833,978 | (19,047) | 3,993,418 | 351 | 11,377.3 | 1,386.0 | 9,991.3 |
| H.L.G. XLG | APR | 497,270 | 470,778 | 3,065,711 | 3,712 | 207 | 489 | 698,634 | 1,814,931 | (1,116,296) | 2,420,193 | 351 | 6,895.1 | 1,341.2 | 5,553.9 |
| H.L.G. XLG | MAY | 497,270 | 486,471 | 1,059,764 | 3,375 | 122 | 207 | 220,242 | 698,634 | (478,392) | 1,067,843 | 350 | 3,042.3 | 1,386.0 | 1,656.3 |
| H.L.G. XLG | JUN | 495,853 | 470,778 | 352,027 | 1,805 | 10 | 122 | - | 220,242 | (220,242) | 609,562 | 351 | 1,721.6 | 1,345.1 | 376.5 |
| H.L.G. XLG | JUL | 528,827 | 486,471 | - | - | 0 | 10 | - | - | - | 486,471 | 350 | 1,389.9 | 1,389.9 | - |
| H.L.G. XLG | AUG | 461,557 | 486,471 | - | - | 3 | 0 | 3,771 | 0 | 3,771 | 490,242 | 349 | 1,404.7 | 1,393.9 | 10.8 |
| H.L.G. XLG | SEP | 494,437 | 470,778 | 52,797 | 1,257 | 49 | 3 | 84,388 | 3,771 | 80,617 | 604,193 | 349 | 1,731.2 | 1,348.9 | 382.3 |
| H.L.G. XLG | OCT | 425,017 | 486,471 | 427,109 | 1,722 | 242 | 49 | 482,071 | 84,388 | 397,682 | 1,311,262 | 300 | 4,370.9 | 1,621.6 | 2,749.3 |
| H.L.G. XLG | NOV | 425,017 | 470,778 | 1,173,304 | 1,992 | 371 | 242 | 893,112 | 482,071 | 411,041 | 2,055,123 | 300 | 6,850.4 | 1,569.3 | 5,281.1 |
| H.L.G. XLG | DEC | 422,184 | 486,471 | 2,147,319 | 2,407 | 551 | 371 | 2,010,594 | 893,112 | 1,117,482 | 3,751,272 | 298 | 12,588.2 | 1,632.5 | 10,955.7 |
| Annual | | 5,743,492 | | | | | | | | | 27,569,661 | | 81,965.4 | | |

| | | 13=Annual 12 Allocated by | | 15=Annual 14 | | Unbilled | | | | | Actual Calendar Month | | | | |
|-----------------------------------|-----|------------------------------|----------------------------|---------------------------------|----------------------------------|-----------------|-------------------|------------------------|---------------------------|---------------------------|-----------------------|----------|-----------------|----------------|--------------|
| | | 12=4*2 22 | 14=1-12 | 25 | 15a | 15b | 15a * 15 next | 15b * 15 | 16 = 15c - 15d | 17=13+15 | 18=2 | 19=17/18 | 20=13/18 | 21=19-20 | |
| C&I Non-Ht LG & XLG G/T 52, 53 | | Billing Therms Base | Calendar Therms Base | Billing Therms above base | Calendar Therms above base | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS |
| NH LG, XLG | JAN | 1,586,174 | 1,674,734 | 848,177 | 809,128 | | | | | | 2,483,861 | 131 | 18,960.8 | | |
| NH LG, XLG | FEB | 1,586,174 | 1,566,686 | 825,140 | 693,819 | | | | | | 2,260,505 | 131 | 17,255.8 | | |
| NH LG, XLG | MAR | 1,586,174 | 1,674,734 | 594,580 | 601,441 | | | | | | 2,276,174 | 131 | 17,375.4 | | |
| NH LG, XLG | APR | 1,574,066 | 1,620,710 | 586,107 | 373,444 | | | | | | 1,994,154 | 130 | 15,359.6 | | |
| NH LG, XLG | MAY | 1,561,958 | 1,674,734 | 131,131 | 176,894 | | | | | | 1,851,628 | 129 | 14,353.7 | | |
| NH LG, XLG | JUN | 1,574,066 | 1,620,710 | 76,822 | 38,655 | | | | | | 1,659,365 | 130 | 12,764.3 | | |
| NH LG, XLG | JUL | 1,584,455 | 1,674,734 | - | - | | | | | | 1,674,734 | 129 | 12,982.4 | | |
| NH LG, XLG | AUG | 1,539,460 | 1,674,734 | - | - | | | | | | 1,674,734 | 129 | 12,982.4 | | |
| NH LG, XLG | SEP | 1,561,958 | 1,620,710 | 24,790 | 73,378 | | | | | | 1,694,088 | 129 | 13,132.5 | | |
| NH LG, XLG | OCT | 1,574,042 | 1,674,734 | - | 275,169 | | | | | | 1,949,003 | 164 | 11,889.7 | | |
| NH LG, XLG | NOV | 2,022,069 | 1,620,710 | 315,004 | 463,856 | | | | | | 2,084,566 | 167 | 12,482.4 | | |
| NH LG, XLG | DEC | 2,022,069 | 1,674,734 | 801,782 | 697,750 | | | | | | 2,372,484 | 167 | 14,206.3 | | |
| Annual | | 19,772,663 | | 4,203,533 | | | | | | | 23,976,196 | | | | |

| | | 13=Annual 12 Allocated by | | 15=Annual 14 | | Unbilled | | | | | Actual Calendar Month | | | | |
|--------|-----|------------------------------|----------------------------|---------------------------------|----------------------------------|-----------------|-------------------|------------------------|---------------------------|---------------------------|-----------------------|-----------|-----------------|----------------|--------------|
| | | 12=4*2 22 | 14=1-12 | 25 | 15a | 15b | 15a * 15 next | 15b * 15 | 16 = 15c - 15d | 17=13+15 | 18=2 | 19=17/18 | 20=13/18 | 21=19-20 | |
| Total | | Billing Therms Base | Calendar Therms Base | Billing Therms above base | Calendar Therms above base | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS |
| | JAN | | | | | | | | | 10,464,220 | 50,867,689 | 138,033 | | | |
| | FEB | | | | | | | | | (8,984,414) | 36,202,243 | 138,167 | | | |
| | MAR | | | | | | | | | (743,717) | 32,445,635 | 138,137 | | | |
| | APR | | | | | | | | | (8,756,993) | 19,385,945 | 137,987 | | | |
| | MAY | | | | | | | | | (2,313,958) | 10,171,416 | 137,240 | | | |
| | JUN | | | | | | | | | (1,514,884) | 7,092,249 | 137,240 | | | |
| | JUL | | | | | | | | | - | 6,308,762 | 136,908 | | | |
| | AUG | | | | | | | | | 10,418 | 6,319,180 | 136,774 | | | |
| | SEP | | | | | | | | | 487,933 | 6,891,942 | 136,803 | | | |
| | OCT | | | | | | | | | 3,720,574 | 13,124,997 | 137,339 | | | |
| | NOV | | | | | | | | | 3,909,932 | 21,250,139 | 138,281 | | | |
| | DEC | | | | | | | | | 6,412,813 | 33,719,851 | 137,354 | | | |
| Annual | | | | | | | | | | 2,691,925 | 243,780,048 | 1,650,494 | | | |

Bay State Gas Billing Month Normalization of Volume for Weather
Brockton Division
 2004

Witness: J.A. Ferro
 D.T.E. 05-27
 Exhibit BSG/JAF-1
 Schedule JAF-1-6
 Page 2
 Sheet 3

Columns carry over from Sheet 1 & 2.

| C&I Non Ht Low/Med G/T 50, 51 | 22 | | 23 | | 24 | | 25 | | 21*(25/24) | | 27=17 | 28=25-24 | 29=27-17 | ((19*(23/22))-19)*18 | | 31=29+30 |
|----------------------------------|--------|--------|------------|------------|------------------|------------|-----------------|-------------------|-------------------------|------------------|-----------------|----------|-----------------|----------------------|----------|----------|
| | 2004 | | 2005 | | Weather Calendar | | Normal Calendar | | Normal Calendar | | Normal v Actual | | Normal v Actual | | Total | |
| | Days | Days | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj | | | | | | |
| NH Lo, Md JAN | 31.00 | 31.00 | 1547 | 1235 | - | 1,612,942 | -312 | - | - | - | - | - | - | (37,465) | (37,465) | |
| NH Lo, Md FEB | 29.00 | 28.25 | 1040 | 1059 | - | 1,448,633 | 19 | - | - | - | - | - | - | - | - | |
| NH Lo, Md MAR | 31.00 | 31.00 | 913 | 918 | - | 1,414,664 | 5 | - | - | - | - | - | - | - | - | |
| NH Lo, Md APR | 30.00 | 30.00 | 535 | 570 | - | 1,169,883 | 35 | - | - | - | - | - | - | - | - | |
| NH Lo, Md MAY | 31.00 | 31.00 | 244 | 270 | - | 1,009,350 | 26 | - | - | - | - | - | - | - | - | |
| NH Lo, Md JUN | 30.00 | 30.00 | 74 | 59 | - | 850,261 | -15 | - | - | - | - | - | - | - | - | |
| NH Lo, Md JUL | 31.00 | 31.00 | - | - | - | 840,469 | - | - | - | - | - | - | - | - | - | |
| NH Lo, Md AUG | 31.00 | 31.00 | - | - | - | 840,469 | - | - | - | - | - | - | - | - | - | |
| NH Lo, Md SEP | 30.00 | 30.00 | 100 | 112 | - | 883,412 | 12 | - | - | - | - | - | - | - | - | |
| NH Lo, Md OCT | 31.00 | 31.00 | 449 | 420 | - | 1,103,172 | -29 | - | - | - | - | - | - | - | - | |
| NH Lo, Md NOV | 30.00 | 30.00 | 720 | 708 | - | 1,256,200 | -12 | - | - | - | - | - | - | - | - | |
| NH Lo, Md DEC | 31.00 | 31.00 | 1077 | 1065 | - | 1,506,610 | -12 | - | - | - | - | - | - | - | - | |
| | 366.00 | 365.25 | 6699 | 6416 | - | 13,936,064 | -283 | - | - | - | - | - | - | (37,465) | (37,465) | |

| C&I Heat LG & XLG G/T 42, 43 | 22 | | 23 | | 24 | | 25 | | 26=20+ | | 27=18*26 | 28=25-24 | 29=27-17 | ((20*(23/22))-20)*18 | | 31=29+30 |
|---------------------------------|--------|--------|------------|------------|------------------|------------|-----------------|-------------------|-------------------------|------------------|-----------------|----------|-----------------|----------------------|-------------|----------|
| | 2004 | | 2005 | | Weather Calendar | | Normal Calendar | | Normal Calendar | | Normal v Actual | | Normal v Actual | | Total | |
| | Days | Days | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj | | | | | | |
| H LG, XLG JAN | 31.00 | 31.00 | 1547 | 1235 | 14,700.2 | 5,189,166 | -312 | (1,188,049) | - | - | - | - | - | (1,188,049) | (1,188,049) | |
| H LG, XLG FEB | 29.00 | 28.25 | 1040 | 1059 | 12,733.3 | 4,482,118 | 19 | 72,251 | - | - | - | - | - | 72,251 | 72,251 | |
| H LG, XLG MAR | 31.00 | 31.00 | 913 | 918 | 11,432.0 | 4,012,624 | 5 | 19,206 | - | - | - | - | - | 19,206 | 19,206 | |
| H LG, XLG APR | 30.00 | 30.00 | 535 | 570 | 7,258.5 | 2,547,724 | 35 | 127,532 | - | - | - | - | - | 127,532 | 127,532 | |
| H LG, XLG MAY | 31.00 | 31.00 | 244 | 270 | 3,218.8 | 1,129,792 | 26 | 61,949 | - | - | - | - | - | 61,949 | 61,949 | |
| H LG, XLG JUN | 30.00 | 30.00 | 74 | 59 | 1,645.3 | 575,849 | -15 | (26,713) | - | - | - | - | - | (26,713) | (26,713) | |
| H LG, XLG JUL | 31.00 | 31.00 | - | - | 1,389.9 | 486,471 | - | (3,771) | - | - | - | - | - | (3,771) | (3,771) | |
| H LG, XLG AUG | 31.00 | 31.00 | - | - | 1,393.9 | 486,471 | - | (3,771) | - | - | - | - | - | (3,771) | (3,771) | |
| H LG, XLG SEP | 30.00 | 30.00 | 100 | 112 | 1,777.1 | 620,202 | 12 | 16,010 | - | - | - | - | - | 16,010 | 16,010 | |
| H LG, XLG OCT | 31.00 | 31.00 | 449 | 420 | 4,193.3 | 1,257,990 | -29 | (53,272) | - | - | - | - | - | (53,272) | (53,272) | |
| H LG, XLG NOV | 30.00 | 30.00 | 720 | 708 | 6,762.4 | 2,028,717 | -12 | (26,406) | - | - | - | - | - | (26,406) | (26,406) | |
| H LG, XLG DEC | 31.00 | 31.00 | 1077 | 1065 | 12,466.1 | 3,714,896 | -12 | (36,377) | - | - | - | - | - | (36,377) | (36,377) | |
| | 366.00 | 365.25 | 6699 | 6416 | 78,970.7 | 26,532,021 | -283 | (1,037,640) | - | - | - | - | - | (1,037,640) | (1,037,640) | |

| C&I Non-Ht LG & XLG G/T 52, 53 | 22 | | 23 | | 24 | | 25 | | 26=20+ | | 27=17 | 28=25-24 | 29=27-17 | ((19*(23/22))-19)*18 | | 31=29+30 |
|-----------------------------------|--------|--------|------------|------------|------------------|------------|-----------------|-------------------|-------------------------|------------------|-----------------|----------|-----------------|----------------------|----------|----------|
| | 2004 | | 2005 | | Weather Calendar | | Normal Calendar | | Normal Calendar | | Normal v Actual | | Normal v Actual | | Total | |
| | Days | Days | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj | | | | | | |
| NH LG, XLG JAN | 31.00 | 31.00 | 1547 | 1235 | - | 2,483,861 | -312 | - | - | - | - | - | - | - | - | |
| NH LG, XLG FEB | 29.00 | 28.25 | 1040 | 1059 | - | 2,260,505 | 19 | - | - | - | - | - | - | (58,461) | (58,461) | |
| NH LG, XLG MAR | 31.00 | 31.00 | 913 | 918 | - | 2,276,174 | 5 | - | - | - | - | - | - | - | - | |
| NH LG, XLG APR | 30.00 | 30.00 | 535 | 570 | - | 1,994,154 | 35 | - | - | - | - | - | - | - | - | |
| NH LG, XLG MAY | 31.00 | 31.00 | 244 | 270 | - | 1,851,628 | 26 | - | - | - | - | - | - | - | - | |
| NH LG, XLG JUN | 30.00 | 30.00 | 74 | 59 | - | 1,659,365 | -15 | - | - | - | - | - | - | - | - | |
| NH LG, XLG JUL | 31.00 | 31.00 | - | - | - | 1,674,734 | - | - | - | - | - | - | - | - | - | |
| NH LG, XLG AUG | 31.00 | 31.00 | - | - | - | 1,674,734 | - | - | - | - | - | - | - | - | - | |
| NH LG, XLG SEP | 30.00 | 30.00 | 100 | 112 | - | 1,694,088 | 12 | - | - | - | - | - | - | - | - | |
| NH LG, XLG OCT | 31.00 | 31.00 | 449 | 420 | - | 1,949,503 | -29 | - | - | - | - | - | - | - | - | |
| NH LG, XLG NOV | 30.00 | 30.00 | 720 | 708 | - | 2,084,566 | -12 | - | - | - | - | - | - | - | - | |
| NH LG, XLG DEC | 31.00 | 31.00 | 1077 | 1065 | - | 2,372,484 | -12 | - | - | - | - | - | - | - | - | |
| | 366.00 | 365.25 | 6699 | 6416 | - | 23,976,196 | -283 | - | - | - | - | - | - | (58,461) | (58,461) | |

| Total | 2004 | | 2005 | | Weather Calendar | | Normal Calendar | | Normal v Actual | | Normal v Actual | | Total |
|-------|------|------|------------|------------|------------------|-------------|-----------------|-------------------|-------------------------|------------------|-----------------|-------------|-------|
| | Days | Days | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj | | | |
| JAN | | | | | | 42,221,058 | | (8,646,631) | - | - | - | (8,646,631) | |
| FEB | | | | | | 36,729,397 | | 527,154 | (190,022) | - | - | 337,132 | |
| MAR | | | | | | 32,581,909 | | 136,274 | - | - | - | 136,274 | |
| APR | | | | | | 20,203,866 | | 817,922 | - | - | - | 817,922 | |
| MAY | | | | | | 10,543,732 | | 372,316 | - | - | - | 372,316 | |
| JUN | | | | | | 6,908,510 | | (183,739) | - | - | - | (183,739) | |
| JUL | | | | | | 6,308,762 | | - | - | - | - | - | |
| AUG | | | | | | 6,308,762 | | (10,418) | - | - | - | (10,418) | |
| SEP | | | | | | 6,967,996 | | 76,054 | - | - | - | 76,054 | |
| OCT | | | | | | 12,721,784 | | (403,213) | - | - | - | (403,213) | |
| NOV | | | | | | 21,013,834 | | (236,305) | - | - | - | (236,305) | |
| DEC | | | | | | 33,430,635 | | (289,216) | - | - | - | (289,216) | |
| | | | | | | 235,940,246 | | -7,839,803 | -190,022 | - | - | -8,029,825 | |

Bay State Gas Billing Month Normalization of Volume for Weather
Lawrence Division
2004

| | | 3=1/2 Actual Billing Month | | | | 5=3-4 | | 6 Weather Billing | | 7 Normal Billing | | 8=4+5(7/6) | | 9=8x2 | | 10=7-6 | | 11=9-1 | |
|------------------|-----|----------------------------|--------|--------------|-------------|-----------|------------|-------------------|---------|------------------|-------|-------------|-----|--------|-----|--------|-----|--------|--|
| Residential Heat | | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms | EDD | Therms | EDD | Therms | EDD | | |
| RH | JAN | 7,906,816 | 37,460 | 211.1 | 24.9 | 186.1 | 1299 | 1260 | 205.5 | 7,697,466 | (39) | (209,350) | | | | | | | |
| RH | FEB | 9,065,342 | 37,523 | 241.6 | 24.9 | 216.7 | 1421 | 1239 | 213.8 | 8,024,071 | (182) | (1,041,271) | | | | | | | |
| RH | MAR | 6,365,146 | 37,499 | 169.7 | 24.9 | 144.8 | 965 | 1041 | 181.1 | 6,792,819 | 76 | 427,673 | | | | | | | |
| RH | APR | 5,582,998 | 37,213 | 150.0 | 24.9 | 125.1 | 857 | 817 | 144.2 | 5,365,714 | (40) | (217,284) | | | | | | | |
| RH | MAY | 2,346,881 | 36,712 | 63.9 | 24.9 | 39.0 | 329 | 435 | 76.5 | 2,808,151 | 106 | 461,270 | | | | | | | |
| RH | JUN | 1,675,662 | 36,593 | 45.8 | 24.9 | 20.9 | 230 | 188 | 42.0 | 1,536,253 | (42) | (139,408) | | | | | | | |
| RH | JUL | 1,026,314 | 36,441 | 28.2 | 24.2 | - | - | - | 28.2 | 1,026,314 | - | - | | | | | | | |
| RH | AUG | 879,905 | 36,332 | 24.2 | 24.2 | - | - | - | 24.2 | 879,905 | - | - | | | | | | | |
| RH | SEP | 939,910 | 36,381 | 25.6 | 24.9 | 0.7 | 67 | 62 | 25.6 | 930,880 | (5) | (1,930) | | | | | | | |
| RH | OCT | 1,414,917 | 36,630 | 38.6 | 24.9 | 13.7 | 283 | 281 | 38.5 | 1,411,371 | (2) | (3,546) | | | | | | | |
| RH | NOV | 3,370,833 | 36,943 | 91.2 | 24.9 | 66.3 | 637 | 577 | 85.0 | 3,140,075 | (60) | (230,757) | | | | | | | |
| RH | DEC | 5,263,291 | 36,521 | 144.1 | 24.9 | 119.2 | 956 | 971 | 146.0 | 5,332,097 | 15 | 68,306 | | | | | | | |
| Annual | | 45,531,414 | | 1,234.2 | | | 7044 | 6871 | 1,210.6 | 44,945,117 | -173 | (886,297) | | | | | | | |

| | | 3=1/2 Actual Billing Month | | | | 5=3-4 | | 6 Weather Billing | | 7 Normal Billing | | 8=4+5(7/6) | | 9=1 | | 10=7-6 | | 11=9-1 | |
|----------------------|-----|----------------------------|-------|--------------|-------------|-----------|------------|-------------------|--------|------------------|-------|------------|-----|--------|-----|--------|-----|--------|--|
| Residential Non-Heat | | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Dth | EDD | Therms | EDD | Therms | EDD | Therms | EDD | | |
| RNH | JAN | 94,175 | 4,141 | 22.7 | 11.6 | - | 1299 | 1260 | - | 94,175 | (39) | - | | | | | | | |
| RNH | FEB | 92,874 | 4,147 | 22.4 | 11.6 | - | 1421 | 1239 | - | 92,874 | (182) | - | | | | | | | |
| RNH | MAR | 85,296 | 4,145 | 20.6 | 11.6 | - | 965 | 1041 | - | 85,296 | 76 | - | | | | | | | |
| RNH | APR | 96,276 | 4,350 | 22.1 | 11.6 | - | 857 | 817 | - | 96,276 | (40) | - | | | | | | | |
| RNH | MAY | 71,976 | 4,568 | 15.8 | 11.6 | - | 329 | 435 | - | 71,976 | 106 | - | | | | | | | |
| RNH | JUN | 68,471 | 4,536 | 15.1 | 11.6 | - | 230 | 188 | - | 68,471 | (42) | - | | | | | | | |
| RNH | JUL | 59,381 | 4,521 | 13.1 | 13.1 | - | - | - | - | 59,381 | - | - | | | | | | | |
| RNH | AUG | 50,572 | 4,510 | 11.2 | 11.2 | - | - | - | - | 50,572 | - | - | | | | | | | |
| RNH | SEP | 53,197 | 4,473 | 11.9 | 11.6 | - | 67 | 62 | - | 53,197 | (5) | - | | | | | | | |
| RNH | OCT | 59,477 | 4,461 | 13.3 | 11.6 | - | 283 | 281 | - | 59,477 | (2) | - | | | | | | | |
| RNH | NOV | 71,731 | 4,429 | 16.2 | 11.6 | - | 637 | 577 | - | 71,731 | (60) | - | | | | | | | |
| RNH | DEC | 90,539 | 4,315 | 21.0 | 11.6 | - | 956 | 971 | - | 90,539 | 15 | - | | | | | | | |
| Annual | | 893,966 | | 205.5 | | | 7044 | 6871 | | 893,966 | -173 | 0 | | | | | | | |

| | | 3=1/2 Actual Billing Month | | | | 5=3-4 | | 6 Weather Billing | | 7 Normal Billing | | 8=4+5(7/6) | | 9=8x2 | | 10=7-6 | | 11=9-1 | |
|------------------|-----|----------------------------|-------|--------------|-------------|-----------|------------|-------------------|---------|------------------|-------|------------|-----|--------|-----|--------|-----|--------|--|
| C&I Heat Low/Med | | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Dth | EDD | Therms | EDD | Therms | EDD | Therms | EDD | | |
| G/T 40, 41 | JAN | 1,976,705 | 2,380 | 830.5 | 60.9 | 769.7 | 1299 | 1260 | 807.4 | 1,921,707 | (39) | (54,998) | | | | | | | |
| Ht Lo, Md | FEB | 2,404,703 | 2,382 | 1,009.5 | 60.9 | 948.7 | 1421 | 1239 | 888.0 | 2,115,279 | (182) | (289,423) | | | | | | | |
| Ht Lo, Md | MAR | 1,641,222 | 2,379 | 689.9 | 60.9 | 629.0 | 965 | 1041 | 739.4 | 1,759,076 | 76 | 117,854 | | | | | | | |
| Ht Lo, Md | APR | 1,258,793 | 2,359 | 533.6 | 60.9 | 472.8 | 857 | 817 | 511.5 | 1,206,741 | (40) | (52,052) | | | | | | | |
| Ht Lo, Md | MAY | 523,699 | 2,320 | 225.7 | 60.9 | 164.9 | 329 | 435 | 278.9 | 646,936 | 106 | 123,237 | | | | | | | |
| Ht Lo, Md | JUN | 289,876 | 2,304 | 125.8 | 60.9 | 65.0 | 230 | 188 | 114.0 | 262,549 | (42) | (27,327) | | | | | | | |
| Ht Lo, Md | JUL | 149,082 | 2,275 | 65.5 | 65.5 | - | - | - | 65.5 | 149,082 | - | - | | | | | | | |
| Ht Lo, Md | AUG | 139,760 | 2,262 | 61.8 | 61.8 | - | - | - | 61.8 | 139,760 | - | - | | | | | | | |
| Ht Lo, Md | SEP | 135,221 | 2,256 | 59.9 | 59.9 | - | 67 | 62 | 59.9 | 135,221 | (5) | - | | | | | | | |
| Ht Lo, Md | OCT | 227,596 | 2,205 | 103.4 | 60.9 | 42.5 | 283 | 281 | 103.1 | 227,333 | (2) | (663) | | | | | | | |
| Ht Lo, Md | NOV | 578,461 | 2,265 | 255.4 | 60.9 | 194.5 | 637 | 577 | 237.1 | 536,959 | (60) | (41,502) | | | | | | | |
| Ht Lo, Md | DEC | 1,053,546 | 2,263 | 465.6 | 60.9 | 404.7 | 956 | 971 | 471.9 | 1,067,915 | 15 | 14,369 | | | | | | | |
| Annual | | 10,379,064 | | 4,426.7 | | | 7044 | 6871 | 4,336.6 | 10,166,559 | -173 | (210,505) | | | | | | | |

Bay State Gas Billing Month Normalization of Volume for Weather
Lawrence Division
2004

| C&I Non Ht Low/Med G/T 50, 51 | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|----------------------------------|----------------------|-------|-----------------|----------------|--------------|-----------------|---------------|----------------|--------|-----------------------------|--------|
| | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms |
| | | | | | | | | | | | |
| NH Lo, Md JAN | 374,796 | 647 | 579.3 | 307.6 | 1299 | 1260 | 374,796 | (39) | - | | |
| NH Lo, Md FEB | 410,062 | 649 | 631.8 | 307.6 | 1421 | 1239 | 410,062 | (182) | - | | |
| NH Lo, Md MAR | 318,136 | 655 | 485.7 | 307.6 | 965 | 1041 | 318,136 | 76 | - | | |
| NH Lo, Md APR | 300,955 | 654 | 460.2 | 307.6 | 857 | 817 | 300,955 | (40) | - | | |
| NH Lo, Md MAY | 269,445 | 651 | 413.9 | 307.6 | 329 | 435 | 269,445 | 106 | - | | |
| NH Lo, Md JUN | 233,225 | 651 | 358.3 | 307.6 | 230 | 188 | 233,225 | (42) | - | | |
| NH Lo, Md JUL | 208,866 | 651 | 320.8 | 307.6 | | | 208,866 | | - | | |
| NH Lo, Md AUG | 193,993 | 644 | 301.2 | 301.2 | | | 193,993 | | - | | |
| NH Lo, Md SEP | 200,977 | 640 | 314.0 | 307.6 | 67 | 62 | 200,977 | (5) | - | | |
| NH Lo, Md OCT | 212,292 | 716 | 296.5 | 296.5 | 283 | 281 | 212,292 | (2) | - | | |
| NH Lo, Md NOV | 311,133 | 719 | 432.7 | 307.6 | 637 | 577 | 311,133 | (60) | - | | |
| NH Lo, Md DEC | 394,491 | 711 | 554.8 | 307.6 | 956 | 971 | 394,491 | 15 | - | | |
| Annual | 3,428,371 | | 5,149.3 | | 7044 | 6871 | 3,428,371 | -173 | 0 | | |

| C&I Heat LG & XLG G/T 42, 43 | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|---------------------------------|----------------------|-------|-----------------|----------------|--------------|-----------------|---------------|----------------|-----------|-----------------------------|-----------|
| | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms |
| | | | | | | | | | | | |
| H LG, XLG JAN | 1,866,208 | 112 | 16,662.6 | 1,703.8 | 14,958.8 | 1299 | 1260 | 16,213.5 | 1,815,907 | (39) | (50,300) |
| H LG, XLG FEB | 2,170,489 | 111 | 19,554.0 | 1,703.8 | 17,850.2 | 1421 | 1239 | 17,267.7 | 1,916,717 | (182) | (253,772) |
| H LG, XLG MAR | 1,811,702 | 115 | 15,753.9 | 1,703.8 | 14,050.2 | 965 | 1041 | 16,850.5 | 1,938,954 | 76 | 127,252 |
| H LG, XLG APR | 1,417,336 | 115 | 12,324.7 | 1,703.8 | 10,620.9 | 857 | 817 | 11,828.9 | 1,360,328 | (40) | (57,008) |
| H LG, XLG MAY | 811,560 | 115 | 7,057.0 | 1,703.8 | 5,353.3 | 329 | 435 | 8,781.8 | 1,009,908 | 106 | 198,348 |
| H LG, XLG JUN | 623,889 | 115 | 5,425.1 | 1,703.8 | 3,721.4 | 230 | 188 | 4,745.6 | 545,740 | (42) | (78,149) |
| H LG, XLG JUL | 208,447 | 115 | 1,812.6 | 1,812.6 | | | | 1,812.6 | 208,447 | | |
| H LG, XLG AUG | 183,416 | 115 | 1,594.9 | 1,594.9 | | | | 1,594.9 | 183,416 | | |
| H LG, XLG SEP | 223,579 | 115 | 1,944.2 | 1,703.8 | 240.4 | 67 | 62 | 1,926.2 | 221,516 | (5) | (2,063) |
| H LG, XLG OCT | 326,851 | 105 | 3,112.9 | 1,703.8 | 1,409.1 | 283 | 281 | 3,102.9 | 325,805 | (2) | (1,046) |
| H LG, XLG NOV | 820,567 | 105 | 7,814.9 | 1,703.8 | 6,111.2 | 637 | 577 | 7,239.3 | 760,127 | (60) | (60,440) |
| H LG, XLG DEC | 1,242,135 | 105 | 11,829.9 | 1,703.8 | 10,126.1 | 956 | 971 | 11,988.7 | 1,258,818 | 15 | 16,683 |
| Annual | 11,706,179 | | 104,886.6 | | 7044 | 6871 | 103,362.6 | 11,545,684 | -173 | (160,495) | |

| C&I Non-Ht LG & XLG G/T 52, 53 | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|-----------------------------------|----------------------|-------|-----------------|----------------|--------------|-----------------|---------------|----------------|--------|-----------------------------|--------|
| | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms |
| | | | | | | | | | | | |
| NH LG, XLG JAN | 2,395,533 | 57 | 42,026.9 | 33,667.2 | 1299 | 1260 | 2,395,533 | (39) | - | | |
| NH LG, XLG FEB | 2,849,516 | 57 | 49,991.5 | 33,667.2 | 1421 | 1239 | 2,849,516 | (182) | - | | |
| NH LG, XLG MAR | 2,615,051 | 57 | 45,878.1 | 33,667.2 | 965 | 1041 | 2,615,051 | 76 | - | | |
| NH LG, XLG APR | 2,646,017 | 57 | 46,421.4 | 33,667.2 | 857 | 817 | 2,646,017 | (40) | - | | |
| NH LG, XLG MAY | 2,216,668 | 58 | 38,218.4 | 33,667.2 | 329 | 435 | 2,216,668 | 106 | - | | |
| NH LG, XLG JUN | 2,230,010 | 58 | 38,448.4 | 33,667.2 | 230 | 188 | 2,230,010 | (42) | - | | |
| NH LG, XLG JUL | 2,163,288 | 58 | 37,298.1 | 37,298.1 | | | 2,163,288 | | - | | |
| NH LG, XLG AUG | 1,829,715 | 58 | 31,546.8 | 31,546.8 | | | 1,829,715 | | - | | |
| NH LG, XLG SEP | 2,075,678 | 58 | 35,787.6 | 33,667.2 | 67 | 62 | 2,075,678 | (5) | - | | |
| NH LG, XLG OCT | 1,846,405 | 73 | 25,293.2 | 25,293.2 | 283 | 281 | 1,846,405 | (2) | - | | |
| NH LG, XLG NOV | 1,597,637 | 73 | 21,885.4 | 21,885.4 | 637 | 577 | 1,597,637 | (60) | - | | |
| NH LG, XLG DEC | 1,818,030 | 73 | 24,904.5 | 24,904.5 | 956 | 971 | 1,818,030 | 15 | - | | |
| Annual | 26,283,548 | | 437,700.3 | | 7044 | 6871 | 26,283,548 | -173 | 0 | | |

| Total | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|--------|----------------------|--------|-----------------|----------------|--------------|-----------------|---------------|----------------|--------|-----------------------------|--------|
| | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms |
| | | | | | | | | | | | |
| JAN | 14,614,233 | 44,797 | | | | | | 14,299,585 | | | |
| FEB | 16,992,986 | 44,869 | | | | | | 15,408,520 | | | |
| MAR | 12,836,553 | 44,850 | | | | | | 13,509,332 | | | |
| APR | 11,302,375 | 44,748 | | | | | | 10,976,030 | | | |
| MAY | 6,240,229 | 44,424 | | | | | | 7,023,084 | | | |
| JUN | 5,121,133 | 44,257 | | | | | | 4,876,248 | | | |
| JUL | 3,815,378 | 44,061 | | | | | | 3,815,378 | | | |
| AUG | 3,277,361 | 43,921 | | | | | | 3,277,361 | | | |
| SEP | 3,621,462 | 43,923 | | | | | | 3,617,469 | | | |
| OCT | 4,087,938 | 44,190 | | | | | | 4,082,684 | | | |
| NOV | 6,750,362 | 44,534 | | | | | | 6,417,663 | | | |
| DEC | 9,862,532 | 43,988 | | | | | | 9,961,890 | | | |
| Annual | 98,522,541 | | | | | | | 97,265,244 | | | |

Bay State Gas Billing Month Normalization of Volume for Weather
Lawrence Division
2004

13=Annual 12 Allocated by

15=Annual 14 Allocated by

15c= 15d=

15a * 15 next 15b * 15

16 = 15c - 15d

17=1+16 18=2 19=17/18 20=13/18 21=19-20

formulas carry over from Sheet 1

| Residential Heat | Billing Month | 12 = 4*2 | | 14=1-12 | | 15=14/6 | | 15a | | 15b | | 15c = 15 next | | 15d = 15 | | 16 = 15c - 15d | | 17=1+16 18=2 19=17/18 20=13/18 21=19-20 | | | | |
|------------------|---------------|---------------------|----------------------|---------------|------------|---------------|----------------|---------------------|------------------------|---------------------|------------------------|------------------------|---------|----------|--------------|----------------|-----------|---|--|--|--|--|
| | | Allocated by | | Billing Month | | Billing Month | | Unbilled | | Unbilled | | Unbilled | | Unbilled | | Net Unbilled | | Actual Calendar Month | | | | |
| | | Billing Therms Base | Calendar Therms Base | Therms TS | TS Th/ EDD | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | | | | | |
| RH | JAN | 933,850 | 941,600 | 6,972,966 | 5,368 | 868 | 504 | 4,966,061 | 2705447 | 2,260,614 | 10,175,181 | 37,460 | 271.6 | 25.1 | 246.5 | | | | | | | |
| RH | FEB | 935,420 | 880,852 | 8,129,922 | 5,721 | 539 | 868 | 3,033,103 | 4966061 | (1,932,958) | 7,077,816 | 37,523 | 188.6 | 23.5 | 165.2 | | | | | | | |
| RH | MAR | 934,822 | 941,600 | 5,430,324 | 5,637 | 513 | 539 | 2,786,665 | 3033103 | (246,438) | 6,125,485 | 37,499 | 163.4 | 25.1 | 138.2 | | | | | | | |
| RH | APR | 927,692 | 911,226 | 4,655,305 | 5,432 | 229 | 513 | 996,518 | 2786665 | (1,790,147) | 3,776,384 | 37,213 | 101.5 | 24.5 | 77.0 | | | | | | | |
| RH | MAY | 915,203 | 941,600 | 1,431,678 | 4,352 | 167 | 229 | 554,313 | 996518 | (442,204) | 1,931,074 | 36,712 | 52.6 | 25.6 | 27.0 | | | | | | | |
| RH | JUN | 912,236 | 911,226 | 763,426 | 3,319 | 22 | 167 | - | 554313 | (554,313) | 1,120,338 | 36,593 | 30.6 | 25.8 | 5.7 | | | | | | | |
| RH | JUL | 1,026,314 | 941,600 | - | - | 6 | 22 | - | 0 | - | 941,600 | 36,441 | 25.8 | 24.9 | - | | | | | | | |
| RH | AUG | 879,905 | 941,600 | - | - | 22 | 6 | 8,491 | 0 | 8,491 | 950,091 | 36,332 | 26.2 | 25.9 | 0.2 | | | | | | | |
| RH | SEP | 906,951 | 911,226 | 25,859 | 386 | 82 | 22 | 145,386 | 8491 | 136,895 | 1,073,980 | 36,381 | 29.5 | 25.0 | 4.5 | | | | | | | |
| RH | OCT | 913,158 | 941,600 | 501,759 | 1,773 | 285 | 82 | 1,096,096 | 145386 | 950,710 | 2,394,069 | 36,630 | 65.4 | 25.7 | 39.7 | | | | | | | |
| RH | NOV | 920,961 | 911,226 | 2,449,871 | 3,846 | 430 | 285 | 1,958,097 | 1096096 | 862,000 | 4,223,097 | 36,943 | 114.3 | 24.7 | 89.6 | | | | | | | |
| RH | DEC | 910,441 | 941,600 | 4,353,350 | 4,554 | 621 | 430 | 3,333,497 | 1958097 | 1,375,400 | 6,670,350 | 36,521 | 182.6 | 25.8 | 156.9 | | | | | | | |
| Annual | | 11,116,953 | | | | | | | | 628,050 | 46,459,464 | | 1,252.1 | | | | | | | | | |

13=Annual 12 Allocated by

15=Annual 14 Allocated by

15c= 15d=

15a * 15 next 15b * 15

16 = 15c - 15d

17=13+15 18=2 19=17/18 20=13/18 21=19-20

| Residential Non-Heat | Billing Month | 12 = 4*2 | | 14=1-12 | | 15=14/6 | | 15a | | 15b | | 15c = 15 next | | 15d = 15 | | 16 = 15c - 15d | | 17=13+15 18=2 19=17/18 20=13/18 21=19-20 | | | | |
|----------------------|---------------|---------------------|----------------------|-------------------|------------|---------------|----------------|---------------------|------------------------|---------------------|------------------------|------------------------|--------|----------|--------------|----------------|-----------|--|--|--|--|--|
| | | Allocated by | | Billing Month | | Billing Month | | Unbilled | | Unbilled | | Unbilled | | Unbilled | | Net Unbilled | | Actual Calendar Month | | | | |
| | | Billing Therms Base | Calendar Therms Base | Therms above base | TS Th/ EDD | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | | | | | |
| RNH | JAN | 47,841 | 51,943 | 46,334 | 53,377 | - | - | - | - | - | 105,320 | 4,141 | 25.4 | - | - | | | | | | | |
| RNH | FEB | 47,911 | 48,592 | 44,964 | 45,646 | - | - | - | - | - | 94,238 | 4,147 | 22.7 | - | - | | | | | | | |
| RNH | MAR | 47,888 | 51,943 | 37,408 | 39,601 | - | - | - | - | - | 91,544 | 4,145 | 22.1 | - | - | | | | | | | |
| RNH | APR | 50,256 | 50,268 | 46,020 | 24,920 | - | - | - | - | - | 75,188 | 4,350 | 17.3 | - | - | | | | | | | |
| RNH | MAY | 52,775 | 51,943 | 19,201 | 12,419 | - | - | - | - | - | 64,362 | 4,568 | 14.1 | - | - | | | | | | | |
| RNH | JUN | 52,405 | 50,268 | 16,066 | 3,166 | - | - | - | - | - | 53,434 | 4,536 | 11.8 | - | - | | | | | | | |
| RNH | JUL | 59,381 | 51,943 | - | - | - | - | - | - | - | 51,943 | 4,521 | 11.5 | - | - | | | | | | | |
| RNH | AUG | 50,572 | 51,943 | - | - | - | - | - | - | - | 51,943 | 4,510 | 11.5 | - | - | | | | | | | |
| RNH | SEP | 51,677 | 50,268 | 1,520 | 5,716 | - | - | - | - | - | 55,984 | 4,473 | 12.5 | - | - | | | | | | | |
| RNH | OCT | 51,538 | 51,943 | 7,939 | 18,875 | - | - | - | - | - | 70,818 | 4,461 | 15.9 | - | - | | | | | | | |
| RNH | NOV | 51,169 | 50,268 | 20,562 | 30,883 | - | - | - | - | - | 81,150 | 4,429 | 18.3 | - | - | | | | | | | |
| RNH | DEC | 49,852 | 51,943 | 40,687 | 46,098 | - | - | - | - | - | 98,041 | 4,315 | 22.7 | - | - | | | | | | | |
| Annual | | 613,264 | | 280,701 | | | | | | | 893,966 | | | | | | | | | | | |

13=Annual 12 Allocated by

15=Annual 14 Allocated by

15c= 15d=

15a * 15 next 15b * 15

16 = 15c - 15d

17=1+16 18=2 19=17/18 20=13/18 21=19-20

C&I Heat Low/Med

G/T 40, 41

| C&I Heat Low/Med | Billing Month | 12 = 4*2 | | 14=1-12 | | 15=14/6 | | 15a | | 15b | | 15c = 15 next | | 15d = 15 | | 16 = 15c - 15d | | 17=1+16 18=2 19=17/18 20=13/18 21=19-20 | | | | |
|------------------|---------------|---------------------|----------------------|---------------|------------|---------------|----------------|---------------------|------------------------|---------------------|------------------------|------------------------|---------|----------|--------------|----------------|-----------|---|--|--|--|--|
| | | Allocated by | | Billing Month | | Billing Month | | Unbilled | | Unbilled | | Unbilled | | Unbilled | | Net Unbilled | | Actual Calendar Month | | | | |
| | | Billing Therms Base | Calendar Therms Base | Therms TS | TS Th/ EDD | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | | | | | |
| Ht Lo, Md | JAN | 144,852 | 143,435 | 1,831,854 | 1,410 | 868 | 504 | 1,380,327 | 710,742 | 669,585 | 2,644,874 | 2,380 | 1,111.3 | 60.3 | 1,051.0 | | | | | | | |
| Ht Lo, Md | FEB | 144,974 | 134,182 | 2,259,729 | 1,590 | 539 | 868 | 835,831 | 1,380,327 | (544,497) | 1,849,414 | 2,382 | 776.4 | 56.3 | 720.1 | | | | | | | |
| Ht Lo, Md | MAR | 144,791 | 143,435 | 1,496,431 | 1,551 | 513 | 539 | 667,570 | 835,831 | (168,261) | 1,471,606 | 2,379 | 618.6 | 60.3 | 558.3 | | | | | | | |
| Ht Lo, Md | APR | 143,574 | 138,809 | 1,115,219 | 1,301 | 229 | 513 | 266,238 | 667,570 | (401,332) | 852,696 | 2,359 | 361.5 | 58.8 | 302.6 | | | | | | | |
| Ht Lo, Md | MAY | 141,200 | 143,435 | 382,499 | 1,163 | 167 | 229 | 108,659 | 266,238 | (157,579) | 368,355 | 2,320 | 158.8 | 61.8 | 96.9 | | | | | | | |
| Ht Lo, Md | JUN | 140,226 | 138,809 | 149,650 | 651 | 22 | 167 | - | 108,659 | (108,659) | 179,800 | 2,304 | 78.0 | 60.2 | 17.8 | | | | | | | |
| Ht Lo, Md | JUL | 149,082 | 143,435 | - | - | 6 | 22 | - | 0 | - | 143,435 | 2,275 | 63.0 | 63.4 | - | | | | | | | |
| Ht Lo, Md | AUG | 139,760 | 143,435 | - | - | 22 | 6 | - | 0 | - | 143,435 | 2,262 | 63.4 | 63.4 | - | | | | | | | |
| Ht Lo, Md | SEP | 135,221 | 138,809 | - | - | 82 | 22 | 27,177 | 0 | 27,177 | 165,986 | 2,256 | 73.6 | 61.5 | 12.0 | | | | | | | |
| Ht Lo, Md | OCT | 134,201 | 143,435 | 93,795 | 331 | 285 | 82 | 197,132 | 27,177 | 169,955 | 407,186 | 2,205 | 184.7 | 65.1 | 119.6 | | | | | | | |
| Ht Lo, Md | NOV | 137,853 | 138,809 | 440,608 | 692 | 430 | 285 | 411,925 | 197,132 | 214,793 | 794,210 | 2,265 | 350.6 | 61.3 | 289.4 | | | | | | | |
| Ht Lo, Md | DEC | 137,731 | 143,435 | 915,815 | 958 | 621 | 430 | 875,736 | 411,925 | 463,811 | 1,523,061 | 2,263 | 673.0 | 63.4 | 609.6 | | | | | | | |
| Annual | | 1,693,464 | | | | | | | | 164,994 | 10,544,058 | | 4,512.9 | | | | | | | | | |

Bay State Gas Billing Month Normalization of Volume for Weather
Lawrence Division
2004

Witness: J.A. Ferro
D.T.E. 05-27
Exhibit BSG/JAF-1
Schedule JAF-1-6
Page 2
Sheet 2

| C&I Non Ht Low/Med G/T 50, 51 | 13=Annual 12 Allocated by | | | | 15=Annual 14 Allocated by | | | | 15c= 15a * 15 next | | | 15d= 15b * 15 | | 16 = 15c - 15d | | 17=13+15 | | 18=2 | | 19=17/18 | | | 20=13/18 | | 21=19-20 | |
|----------------------------------|------------------------------|----------------------------|---------------------------------|----------------------------------|------------------------------|-------------------|------------------------|---------------------------|---------------------------|--------|-------|-----------------------|----------------|----------------|--|----------|--|------|--|----------|--|--|----------|--|----------|--|
| | 12 = 4*2 22 | | 14=1-12 25 | | 15a | | 15b | | Unbilled | | | Actual Calendar Month | | | | | | | | | | | | | | |
| | Billing Therms Base | Calendar Therms Base | Billing Therms above base | Calendar Therms above base | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Tb/Cus Total | Tb/Cus Base | Tb/Cus TS | | | | | | | | | | | | |
| NH Lo, Md SEP | 199,036 | 207,840 | 175,760 | 185,310 | | | | | 393,150 | 647 | 607.7 | | | | | | | | | | | | | | | |
| NH Lo, Md OCT | 199,651 | 194,431 | 210,411 | 158,470 | | | | | 352,901 | 649 | 543.8 | | | | | | | | | | | | | | | |
| NH Lo, Md NOV | 201,497 | 207,840 | 116,639 | 137,484 | | | | | 345,323 | 655 | 527.2 | | | | | | | | | | | | | | | |
| NH Lo, Md DEC | 201,189 | 201,135 | 99,766 | 86,516 | | | | | 287,651 | 654 | 439.8 | | | | | | | | | | | | | | | |
| NH Lo, Md JAN | 200,266 | 207,840 | 69,179 | 43,115 | | | | | 230,955 | 651 | 385.5 | | | | | | | | | | | | | | | |
| NH Lo, Md FEB | 200,266 | 201,135 | 32,959 | 10,993 | | | | | 212,128 | 651 | 325.8 | | | | | | | | | | | | | | | |
| NH Lo, Md MAR | 208,866 | 207,840 | | | | | | | 207,840 | 651 | 319.3 | | | | | | | | | | | | | | | |
| NH Lo, Md APR | 193,993 | 207,840 | | | | | | | 207,840 | 644 | 322.7 | | | | | | | | | | | | | | | |
| NH Lo, Md MAY | 196,883 | 201,135 | 4,094 | 19,844 | | | | | 220,980 | 640 | 345.3 | | | | | | | | | | | | | | | |
| NH Lo, Md JUN | 212,292 | 207,840 | 0 | 65,530 | | | | | 273,369 | 716 | 381.8 | | | | | | | | | | | | | | | |
| NH Lo, Md JUL | 221,185 | 201,135 | 89,948 | 107,217 | | | | | 308,353 | 719 | 428.9 | | | | | | | | | | | | | | | |
| NH Lo, Md AUG | 218,724 | 207,840 | 175,767 | 160,041 | | | | | 367,881 | 711 | 517.4 | | | | | | | | | | | | | | | |
| Annual | 2,453,849 | | 974,521 | | | | | | 3,428,371 | | | | | | | | | | | | | | | | | |

| C&I Heat LG & XLG G/T 42, 43 | 13=Annual 12 Allocated by | | | | 15=Annual 14 Allocated by | | | | 15c= 15a * 15 next | | | 15d= 15b * 15 | | 16 = 15c - 15d | | 17=1+16 | | 18=2 | | 19=17/18 | | | 20=13/18 | | 21=19-20 | |
|---------------------------------|------------------------------|----------------------------|-------------------------|-------------------------------------|------------------------------|-------------------|------------------------|---------------------------|---------------------------|------------|-------|-----------------------|----------------|----------------|--|---------|--|------|--|----------|--|--|----------|--|----------|--|
| | 12 = 4*2 22 | | 14=1-12 25 | | 15a | | 15b | | Unbilled | | | Actual Calendar Month | | | | | | | | | | | | | | |
| | Billing Therms Base | Calendar Therms Base | Billing Therms TS | Calendar Therms TS Th/ EDD | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Tb/Cus Total | Tb/Cus Base | Tb/Cus TS | | | | | | | | | | | | |
| H.LG, XLG JAN | 190,820 | 193,804 | 1,675,387 | 1,290 | 868 | 504 | 1,210,297 | 650,035 | 560,262 | 2,429,453 | 112 | 21,691.5 | 1,730.4 | 19,961.2 | | | | | | | | | | | | |
| H.LG, XLG FEB | 189,116 | 181,301 | 1,981,373 | 1,394 | 539 | 868 | 902,487 | 1,210,297 | (307,809) | 1,854,864 | 111 | 16,710.5 | 1,633.3 | 15,077.1 | | | | | | | | | | | | |
| H.LG, XLG MAR | 195,932 | 193,804 | 1,615,771 | 1,674 | 513 | 539 | 731,132 | 902,487 | (171,355) | 1,638,220 | 115 | 14,245.4 | 1,685.3 | 12,560.1 | | | | | | | | | | | | |
| H.LG, XLG APR | 195,932 | 187,552 | 1,221,405 | 1,425 | 229 | 513 | 428,507 | 731,132 | (302,625) | 1,106,332 | 115 | 9,620.3 | 1,630.9 | 7,989.4 | | | | | | | | | | | | |
| H.LG, XLG MAY | 195,932 | 193,804 | 615,629 | 1,871 | 167 | 229 | 310,734 | 428,507 | (117,773) | 691,660 | 115 | 6,014.4 | 1,685.3 | 4,329.2 | | | | | | | | | | | | |
| H.LG, XLG JUN | 195,932 | 187,552 | 427,958 | 1,861 | 6 | 22 | - | 310,734 | (310,734) | 304,776 | 115 | 2,650.2 | 1,630.9 | 1,019.3 | | | | | | | | | | | | |
| H.LG, XLG JUL | 208,447 | 193,804 | | | 22 | 6 | 9,078 | 0 | 9,078 | 202,882 | 115 | 1,764.2 | 1,685.3 | 78.9 | | | | | | | | | | | | |
| H.LG, XLG AUG | 183,416 | 193,804 | 27,648 | 413 | 82 | 22 | 42,871 | 9,078 | 33,793 | 248,993 | 115 | 2,165.2 | 1,630.9 | 534.3 | | | | | | | | | | | | |
| H.LG, XLG SEP | 195,932 | 187,552 | | 523 | 285 | 82 | 287,091 | 42,871 | 244,220 | 585,981 | 105 | 5,580.8 | 1,845.8 | 3,735.0 | | | | | | | | | | | | |
| H.LG, XLG OCT | 178,894 | 193,804 | 147,957 | 1,007 | 430 | 285 | 478,236 | 287,091 | 191,145 | 1,020,371 | 105 | 9,717.8 | 1,786.2 | 7,931.6 | | | | | | | | | | | | |
| H.LG, XLG NOV | 178,894 | 193,804 | 1,063,241 | 1,112 | 621 | 430 | 800,936 | 478,236 | 322,700 | 1,579,745 | 105 | 15,045.2 | 1,845.8 | 13,199.4 | | | | | | | | | | | | |
| H.LG, XLG DEC | 178,894 | 193,804 | | | 621 | 430 | | | 322,700 | 1,579,745 | 105 | 15,045.2 | 1,845.8 | 13,199.4 | | | | | | | | | | | | |
| Annual | 2,288,139 | | | | | | | | 150,901 | 11,857,080 | | | 106,890.7 | | | | | | | | | | | | | |

| C&I Non-Ht LG & XLG G/T 52, 53 | 13=Annual 12 Allocated by | | | | 15=Annual 14 Allocated by | | | | 15c= 15a * 15 next | | | 15d= 15b * 15 | | 16 = 15c - 15d | | 17=13+15 | | 18=2 | | 19=17/18 | | | 20=13/18 | | 21=19-20 | |
|-----------------------------------|------------------------------|----------------------------|---------------------------------|----------------------------------|------------------------------|-------------------|------------------------|---------------------------|---------------------------|--------|----------|-----------------------|----------------|----------------|--|----------|--|------|--|----------|--|--|----------|--|----------|--|
| | 12 = 4*2 22 | | 14=1-12 25 | | 15a | | 15b | | Unbilled | | | Actual Calendar Month | | | | | | | | | | | | | | |
| | Billing Therms Base | Calendar Therms Base | Billing Therms above base | Calendar Therms above base | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Tb/Cus Total | Tb/Cus Base | Tb/Cus TS | | | | | | | | | | | | |
| NH LG, XLG JAN | 1,919,029 | 1,930,240 | 476,504 | 664,453 | | | | | 2,594,693 | 57 | 45,520.9 | | | | | | | | | | | | | | | |
| NH LG, XLG FEB | 1,919,029 | 1,805,708 | 930,487 | 568,215 | | | | | 2,373,923 | 57 | 41,647.8 | | | | | | | | | | | | | | | |
| NH LG, XLG MAR | 1,919,029 | 1,930,240 | 696,022 | 492,965 | | | | | 2,423,205 | 57 | 42,512.4 | | | | | | | | | | | | | | | |
| NH LG, XLG APR | 1,919,029 | 1,867,974 | 726,988 | 310,215 | | | | | 2,178,189 | 57 | 38,213.8 | | | | | | | | | | | | | | | |
| NH LG, XLG MAY | 1,952,697 | 1,930,240 | 263,972 | 154,595 | | | | | 2,084,835 | 58 | 35,945.4 | | | | | | | | | | | | | | | |
| NH LG, XLG JUN | 1,952,697 | 1,867,974 | 277,314 | 39,417 | | | | | 1,907,391 | 58 | 32,886.0 | | | | | | | | | | | | | | | |
| NH LG, XLG JUL | 2,163,288 | 1,930,240 | | | | | | | 1,930,240 | 58 | 33,280.0 | | | | | | | | | | | | | | | |
| NH LG, XLG AUG | 1,829,715 | 1,930,240 | | | | | | | 1,930,240 | 58 | 33,280.0 | | | | | | | | | | | | | | | |
| NH LG, XLG SEP | 1,952,697 | 1,867,974 | 122,982 | 71,155 | | | | | 1,939,129 | 58 | 33,433.3 | | | | | | | | | | | | | | | |
| NH LG, XLG OCT | 1,846,405 | 1,930,240 | | 234,965 | | | | | 2,165,204 | 73 | 29,660.3 | | | | | | | | | | | | | | | |
| NH LG, XLG NOV | 1,597,637 | 1,867,974 | | 384,441 | | | | | 2,252,415 | 73 | 30,855.0 | | | | | | | | | | | | | | | |
| NH LG, XLG DEC | 1,818,030 | 1,930,240 | | 573,846 | | | | | 2,504,086 | 73 | 34,302.5 | | | | | | | | | | | | | | | |
| Annual | 22,789,282 | | 3,494,266 | | | | | | 26,283,548 | | | | | | | | | | | | | | | | | |

| Total | 13=Annual 12 Allocated by | | | | 15=Annual 14 Allocated by | | | | 15c= 15a * 15 next | | | 15d= 15b * 15 | | 16 = 15c - 15d | | 17=13+15 | | 18=2 | | 19=17/18 | | | 20=13/18 | | 21=19-20 | |
|--------|------------------------------|----------------------------|---------------------------------|----------------------------------|------------------------------|-------------------|------------------------|---------------------------|---------------------------|---------|-------|-----------------------|----------------|----------------|--|----------|--|------|--|----------|--|--|----------|--|----------|--|
| | 12 = 4*2 22 | | 14=1-12 25 | | 15a | | 15b | | Unbilled | | | Actual Calendar Month | | | | | | | | | | | | | | |
| | Billing Therms Base | Calendar Therms Base | Billing Therms above base | Calendar Therms above base | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Tb/Cus Total | Tb/Cus Base | Tb/Cus TS | | | | | | | | | | | | |
| JAN | | | | | | | | 3,490,461 | 18,342,671 | 44,797 | | | | | | | | | | | | | | | | |
| FEB | | | | | | | | (2,785,263) | 13,603,156 | 44,869 | | | | | | | | | | | | | | | | |
| MAR | | | | | | | | (586,054) | 12,095,383 | 44,850 | | | | | | | | | | | | | | | | |
| APR | | | | | | | | (2,494,104) | 8,276,439 | 44,748 | | | | | | | | | | | | | | | | |
| MAY | | | | | | | | (717,557) | 5,391,241 | 44,424 | | | | | | | | | | | | | | | | |
| JUN | | | | | | | | (973,706) | 3,777,866 | 44,257 | | | | | | | | | | | | | | | | |
| JUL | | | | | | | | - | 3,468,862 | 44,061 | | | | | | | | | | | | | | | | |
| AUG | | | | | | | | 17,569 | 3,486,431 | 43,921 | | | | | | | | | | | | | | | | |
| SEP | | | | | | | | 197,865 | 3,705,050 | 43,923 | | | | | | | | | | | | | | | | |
| OCT | | | | | | | | 1,364,885 | 5,896,627 | 44,190 | | | | | | | | | | | | | | | | |
| NOV | | | | | | | | 1,267,938 | 8,679,595 | 44,534 | | | | | | | | | | | | | | | | |
| DEC | | | | | | | | 2,161,911 | 12,743,163 | 43,988 | | | | | | | | | | | | | | | | |
| Annual | | | | | | | | 943,945 | 99,466,485 | 532,562 | | | | | | | | | | | | | | | | |

Bay State Gas Billing Month Normalization of Volume for Weather
Lawrence Division
2004

formulas carry over from Sheets 1 and 2

| | | 22 | | 23 | | 24 | | 25 | | 26=20+ 21*(25/24) | | 27=18*26 | | 28=25-24 | | 29=27-17 | | 30= (20*(23/22))-20*18 | | 31=29+30 | | |
|------------------|-----|--------|--------|------|------|------------------|--------|------------------|------------|----------------------|-------------|-----------------|--------------|-----------------|-------------|-----------------|-------|---------------------------|--------------|-----------------|----------|-------------|
| Residential Heat | | 2004 | | 2005 | | Weather Calendar | | Weather Calendar | | Normal Calendar | | Normal Calendar | | Normal v Actual | | Normal v Actual | | Normal v Actual | | Normal v Actual | | |
| | | Days | Days | EDD | EDD | Actual | Normal | Th/Cus | Therms | EDD | 2004 Wx | Therm Adj | Base Th from | Total | Therm Adj | Base Th from | Total | Therm Adj | Base Th from | Total | | |
| RH | JAN | 31.00 | 31.00 | 1621 | 1298 | 1621 | 1298 | 222.5 | 8,335,300 | -323 | (1,839,881) | 73,437 | (22,781) | 30,656 | (1,839,881) | | | | | | | |
| RH | FEB | 29.00 | 28.25 | 1097 | 1110 | 1097 | 1110 | 190.6 | 7,151,253 | 13 | | 121,196 | | 121,196 | | | | | | | | |
| RH | MAR | 31.00 | 31.00 | 941 | 963 | 941 | 963 | 166.6 | 6,246,681 | 22 | | 202,485 | | 202,485 | | | | | | | | |
| RH | APR | 30.00 | 30.00 | 566 | 606 | 566 | 606 | 106.9 | 3,978,869 | 40 | | 117,271 | | 117,271 | | | | | | | | |
| RH | MAY | 31.00 | 31.00 | 270 | 302 | 270 | 302 | 55.8 | 2,048,345 | 32 | | (34,094) | | (34,094) | | | | | | | | |
| RH | JUN | 30.00 | 30.00 | 92 | 77 | 92 | 77 | 29.7 | 1,086,244 | -15 | | | | | | | | | | | | |
| RH | JUL | 31.00 | 31.00 | | | | | 25.8 | 941,600 | | | | | | | | | | | | | |
| RH | AUG | 31.00 | 31.00 | | | | | 25.9 | 941,600 | | | (8,491) | | (8,491) | | | | | | | | |
| RH | SEP | 30.00 | 30.00 | 131 | 139 | 131 | 139 | 29.8 | 1,083,919 | 8 | | 9,939 | | 9,939 | | | | | | | | |
| RH | OCT | 31.00 | 31.00 | 490 | 459 | 490 | 459 | 62.8 | 2,302,178 | -31 | | (91,891) | | (91,891) | | | | | | | | |
| RH | NOV | 30.00 | 30.00 | 775 | 751 | 775 | 751 | 111.5 | 4,120,536 | -24 | | (102,561) | | (102,561) | | | | | | | | |
| RH | DEC | 31.00 | 31.00 | 1146 | 1121 | 1146 | 1121 | 179.2 | 6,545,377 | -25 | | (124,973) | | (124,973) | | | | | | | | |
| | | 366.00 | 365.25 | 7129 | 6826 | 7129 | 6826 | 1,207.2 | 44,781,901 | -303 | | (1,677,563) | | (1,677,563) | | | | | | | (22,781) | (1,700,344) |

| | | 22 | | 23 | | 24 | | 25 | | 26=20+ 21*(25/24) | | 27=17 | | 28=25-24 | | 29=27-17 | | 30= (19*(23/22))-19*18 | | 31=29+30 | | |
|----------------------|-----|--------|--------|------|------|------------------|--------|------------------|---------|----------------------|---------|-----------------|--------------|-----------------|-----------|-----------------|-------|---------------------------|--------------|-----------------|---------|---------|
| Residential Non-Heat | | 2004 | | 2005 | | Weather Calendar | | Weather Calendar | | Normal Calendar | | Normal Calendar | | Normal v Actual | | Normal v Actual | | Normal v Actual | | Normal v Actual | | |
| | | Days | Days | EDD | EDD | Actual | Normal | Th/Cus | Therms | EDD | 2004 Wx | Therm Adj | Base Th from | Total | Therm Adj | Base Th from | Total | Therm Adj | Base Th from | Total | | |
| RNH | JAN | 31.00 | 31.00 | 1621 | 1298 | 1621 | 1298 | - | 103,320 | -323 | | | | | | | | | | | | |
| RNH | FEB | 29.00 | 28.25 | 1097 | 1110 | 1097 | 1110 | - | 94,238 | 13 | | | (2,437) | (2,437) | | | | | | | | |
| RNH | MAR | 31.00 | 31.00 | 941 | 963 | 941 | 963 | - | 91,544 | 22 | | | | | | | | | | | | |
| RNH | APR | 30.00 | 30.00 | 566 | 606 | 566 | 606 | - | 75,188 | 40 | | | | | | | | | | | | |
| RNH | MAY | 31.00 | 31.00 | 270 | 302 | 270 | 302 | - | 64,362 | 32 | | | | | | | | | | | | |
| RNH | JUN | 30.00 | 30.00 | 92 | 77 | 92 | 77 | - | 53,434 | -15 | | | | | | | | | | | | |
| RNH | JUL | 31.00 | 31.00 | | | | | - | 51,943 | | | | | | | | | | | | | |
| RNH | AUG | 31.00 | 31.00 | | | | | - | 51,943 | | | | | | | | | | | | | |
| RNH | SEP | 30.00 | 30.00 | 131 | 139 | 131 | 139 | - | 55,984 | 8 | | | | | | | | | | | | |
| RNH | OCT | 31.00 | 31.00 | 490 | 459 | 490 | 459 | - | 70,818 | -31 | | | | | | | | | | | | |
| RNH | NOV | 30.00 | 30.00 | 775 | 751 | 775 | 751 | - | 81,150 | -24 | | | | | | | | | | | | |
| RNH | DEC | 31.00 | 31.00 | 1146 | 1121 | 1146 | 1121 | - | 98,041 | -25 | | | | | | | | | | | | |
| | | 366.00 | 365.25 | 7129 | 6826 | 7129 | 6826 | - | 893,966 | -303 | | | | | | | | | | | (2,437) | (2,437) |

| | | 22 | | 23 | | 24 | | 25 | | 26=20+ 21*(25/24) | | 27=18*26 | | 28=25-24 | | 29=27-17 | | 30= (20*(23/22))-20*18 | | 31=29+30 | | |
|------------------|-----|--------|--------|------|------|------------------|--------|------------------|------------|----------------------|---------|-----------------|--------------|-----------------|-----------|-----------------|-------|---------------------------|--------------|-----------------|---------|-----------|
| C&I Heat Low/Med | | 2004 | | 2005 | | Weather Calendar | | Weather Calendar | | Normal Calendar | | Normal Calendar | | Normal v Actual | | Normal v Actual | | Normal v Actual | | Normal v Actual | | |
| G/T 40.41 | | Days | Days | EDD | EDD | Actual | Normal | Th/Cus | Therms | EDD | 2004 Wx | Therm Adj | Base Th from | Total | Therm Adj | Base Th from | Total | Therm Adj | Base Th from | Total | | |
| Hi Lo, Md | JAN | 31.00 | 31.00 | 1621 | 1298 | 1621 | 1298 | 901.9 | 2,146,438 | -323 | | (498,436) | | 16,856 | | | | | | | | |
| Hi Lo, Md | FEB | 29.00 | 28.25 | 1097 | 1110 | 1097 | 1110 | 784.9 | 1,869,740 | 13 | | 20,326 | (3,470) | 31,052 | | | | | | | | |
| Hi Lo, Md | MAR | 31.00 | 31.00 | 941 | 963 | 941 | 963 | 631.6 | 1,502,658 | 22 | | 31,052 | | 31,052 | | | | | | | | |
| Hi Lo, Md | APR | 30.00 | 30.00 | 566 | 606 | 566 | 606 | 382.9 | 903,147 | 40 | | 50,451 | | 50,451 | | | | | | | | |
| Hi Lo, Md | MAY | 31.00 | 31.00 | 270 | 302 | 270 | 302 | 170.3 | 395,012 | 32 | | 26,657 | | 26,657 | | | | | | | | |
| Hi Lo, Md | JUN | 30.00 | 30.00 | 92 | 77 | 92 | 77 | 75.1 | 173,116 | -15 | | (6,683) | | (6,683) | | | | | | | | |
| Hi Lo, Md | JUL | 31.00 | 31.00 | | | | | 63.0 | 143,435 | | | | | | | | | | | | | |
| Hi Lo, Md | AUG | 31.00 | 31.00 | | | | | 63.4 | 143,435 | | | | | | | | | | | | | |
| Hi Lo, Md | SEP | 30.00 | 30.00 | 131 | 139 | 131 | 139 | 74.3 | 167,646 | 8 | | 1,660 | | 1,660 | | | | | | | | |
| Hi Lo, Md | OCT | 31.00 | 31.00 | 490 | 459 | 490 | 459 | 177.1 | 390,499 | -31 | | (16,686) | | (16,686) | | | | | | | | |
| Hi Lo, Md | NOV | 30.00 | 30.00 | 775 | 751 | 775 | 751 | 341.7 | 773,913 | -24 | | (20,296) | | (20,296) | | | | | | | | |
| Hi Lo, Md | DEC | 31.00 | 31.00 | 1146 | 1121 | 1146 | 1121 | 659.7 | 1,492,365 | -25 | | (30,097) | | (30,097) | | | | | | | | |
| | | 366.00 | 365.25 | 7129 | 6826 | 7129 | 6826 | 4,326.0 | 10,102,006 | -303 | | (442,052) | | (442,052) | | | | | | | (3,470) | (445,522) |

Bay State Gas Billing Month Normalization of Volume for Weather

Lawrence Division
2004

Witness: J.A. Ferro
D.T.E. 05-27
Exhibit BSG/JAF-1
Schedule JAF-1-6
Page 2
Sheet 3

| C&I Non Ht Low/Med G/T 50, 51 | 2004 Days | 2005 Days | Weather Calendar | | Normal Calendar | | 28=25-24 | 29=27-17 | 30= (19*(23/22))-19*18 | 31=29+30 | | | |
|----------------------------------|--------------|--------------|------------------|--------|-----------------|-----------|----------|----------|---------------------------|----------|----------------------|----------------------------|---------------------|
| | | | EDD | EDD | Th/Cus | Therms | | | | | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj |
| | | | Actual | Normal | | | | | | | | | |
| NH Lo, Md SEP | 31.00 | 31.00 | 1621 | 1298 | - | 393,150 | -323 | - | - | - | | | |
| NH Lo, Md OCT | 29.00 | 28.25 | 1097 | 1110 | - | 352,901 | 13 | - | (9,127) | (9,127) | | | |
| NH Lo, Md NOV | 31.00 | 31.00 | 941 | 963 | - | 345,323 | 22 | - | - | - | | | |
| NH Lo, Md DEC | 30.00 | 30.00 | 566 | 606 | - | 287,651 | 40 | - | - | - | | | |
| NH Lo, Md JAN | 31.00 | 31.00 | 270 | 302 | - | 250,955 | 32 | - | - | - | | | |
| NH Lo, Md FEB | 30.00 | 30.00 | 92 | 77 | - | 212,128 | -15 | - | - | - | | | |
| NH Lo, Md MAR | 31.00 | 31.00 | - | - | - | 207,840 | - | - | - | - | | | |
| NH Lo, Md APR | 31.00 | 31.00 | - | - | - | 207,840 | - | - | - | - | | | |
| NH Lo, Md MAY | 30.00 | 30.00 | 131 | 139 | - | 220,980 | 8 | - | - | - | | | |
| NH Lo, Md JUN | 31.00 | 31.00 | 490 | 459 | - | 273,369 | -31 | - | - | - | | | |
| NH Lo, Md JUL | 30.00 | 30.00 | 775 | 751 | - | 308,353 | -24 | - | - | - | | | |
| NH Lo, Md AUG | 31.00 | 31.00 | 1146 | 1121 | - | 367,881 | -25 | - | - | - | | | |
| | 366.00 | 365.25 | 7129 | 6826 | - | 3,428,371 | -303 | - | (9,127) | (9,127) | | | |

| C&I Heat LG & XLG G/T 42, 43 | 2004 Days | 2005 Days | Weather Calendar | | Normal Calendar | | 28=25-24 | 29=27-17 | 30= (20*(23/22))-20*18 | 31=29+30 | | | |
|---------------------------------|--------------|--------------|------------------|--------|-----------------|------------|----------|-----------|---------------------------|-----------|----------------------|----------------------------|---------------------|
| | | | EDD | EDD | Th/Cus | Therms | | | | | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj |
| | | | Actual | Normal | | | | | | | | | |
| H LG, XLG JAN | 31.00 | 31.00 | 1621 | 1298 | 17,714.1 | 1,983,978 | -323 | (445,475) | - | (445,475) | | | |
| H LG, XLG FEB | 29.00 | 28.25 | 1097 | 1110 | 16,889.2 | 1,874,697 | 13 | 19,833 | (4,689) | 15,144 | | | |
| H LG, XLG MAR | 31.00 | 31.00 | 941 | 963 | 14,539.0 | 1,671,989 | 22 | 33,770 | - | 33,770 | | | |
| H LG, XLG APR | 30.00 | 30.00 | 566 | 606 | 10,184.9 | 1,171,263 | 40 | 64,931 | - | 64,931 | | | |
| H LG, XLG MAY | 31.00 | 31.00 | 270 | 302 | 6,527.5 | 750,665 | 32 | 59,005 | - | 59,005 | | | |
| H LG, XLG JUN | 30.00 | 30.00 | 92 | 77 | 2,484.0 | 285,663 | -15 | (19,112) | - | (19,112) | | | |
| H LG, XLG JUL | 31.00 | 31.00 | - | - | 1,685.3 | 193,804 | - | - | - | - | | | |
| H LG, XLG AUG | 31.00 | 31.00 | - | - | 1,685.3 | 193,804 | - | (9,078) | - | (9,078) | | | |
| H LG, XLG SEP | 30.00 | 30.00 | 131 | 139 | 2,197.8 | 252,745 | 8 | 3,752 | - | 3,752 | | | |
| H LG, XLG OCT | 31.00 | 31.00 | 490 | 459 | 5,344.5 | 561,170 | -31 | (24,811) | - | (24,811) | | | |
| H LG, XLG NOV | 30.00 | 30.00 | 775 | 751 | 9,472.2 | 994,580 | -24 | (25,791) | - | (25,791) | | | |
| H LG, XLG DEC | 31.00 | 31.00 | 1146 | 1121 | 14,757.2 | 1,549,511 | -25 | (30,234) | - | (30,234) | | | |
| | 366.00 | 365.25 | 7129 | 6826 | 103,480.9 | 11,483,869 | -303 | (373,211) | (4,689) | (377,900) | | | |

| C&I Non-Ht LG & XLG G/T 52, 53 | 2004 Days | 2005 Days | Weather Calendar | | Normal Calendar | | 28=25-24 | 29=27-17 | 30= (19*(23/22))-19*18 | 31=29+30 | | | |
|-----------------------------------|--------------|--------------|------------------|--------|-----------------|------------|----------|----------|---------------------------|----------|----------------------|----------------------------|---------------------|
| | | | EDD | EDD | Th/Cus | Therms | | | | | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj |
| | | | Actual | Normal | | | | | | | | | |
| NH LG, XLG JAN | 31.00 | 31.00 | 1621 | 1298 | - | 2,594,693 | -323 | - | - | - | | | |
| NH LG, XLG FEB | 29.00 | 28.25 | 1097 | 1110 | - | 2,373,923 | 13 | - | (61,395) | (61,395) | | | |
| NH LG, XLG MAR | 31.00 | 31.00 | 941 | 963 | - | 2,423,205 | 22 | - | - | - | | | |
| NH LG, XLG APR | 30.00 | 30.00 | 566 | 606 | - | 2,178,189 | 40 | - | - | - | | | |
| NH LG, XLG MAY | 31.00 | 31.00 | 270 | 302 | - | 2,084,835 | 32 | - | - | - | | | |
| NH LG, XLG JUN | 30.00 | 30.00 | 92 | 77 | - | 1,907,391 | -15 | - | - | - | | | |
| NH LG, XLG JUL | 31.00 | 31.00 | - | - | - | 1,930,240 | - | - | - | - | | | |
| NH LG, XLG AUG | 31.00 | 31.00 | - | - | - | 1,930,240 | - | - | - | - | | | |
| NH LG, XLG SEP | 30.00 | 30.00 | 131 | 139 | - | 1,939,129 | 8 | - | - | - | | | |
| NH LG, XLG OCT | 31.00 | 31.00 | 490 | 459 | - | 2,165,204 | -31 | - | - | - | | | |
| NH LG, XLG NOV | 30.00 | 30.00 | 775 | 751 | - | 2,252,415 | -24 | - | - | - | | | |
| NH LG, XLG DEC | 31.00 | 31.00 | 1146 | 1121 | - | 2,504,086 | -25 | - | - | - | | | |
| | 366.00 | 365.25 | 7129 | 6826 | - | 26,283,548 | -303 | - | (61,395) | (61,395) | | | |

| Total | 2004 Days | 2005 Days | Weather Calendar | | Normal Calendar | | Normal v Actual | | | |
|-------|--------------|--------------|------------------|-----|-----------------|------------|-----------------|----------------------|----------------------------|---------------------|
| | | | EDD | EDD | Th/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj |
| JAN | | | | | | 15,558,879 | | (2,783,791) | - | (2,783,791) |
| FEB | | | | | | 13,716,752 | | 113,596 | (103,898) | 9,698 |
| MAR | | | | | | 12,281,401 | | 186,017 | - | 186,017 |
| APR | | | | | | 8,594,307 | | 317,867 | - | 317,867 |
| MAY | | | | | | 5,594,174 | | 202,933 | - | 202,933 |
| JUN | | | | | | 3,717,976 | | (59,890) | - | (59,890) |
| JUL | | | | | | 3,468,862 | | - | - | - |
| AUG | | | | | | 3,468,862 | | (17,569) | - | (17,569) |
| SEP | | | | | | 3,720,401 | | 15,351 | - | 15,351 |
| OCT | | | | | | 5,763,239 | | (133,388) | - | (133,388) |
| NOV | | | | | | 8,530,947 | | (148,648) | - | (148,648) |
| DEC | | | | | | 12,557,860 | | (185,304) | - | (185,304) |
| | | | | | | 96,973,660 | | -2,492,826 | -103,898 | -2,596,724 |

Bay State Gas Billing Month Normalization of Volume for Weather
Springfield Division
2004

| | | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|------------------|--------|----------------------|--------|--------------|-------------|-----------|-----------------|------------|----------------|------------|-----------------------------|-------------|
| | | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms |
| Residential Heat | | | | | | | | | | | | |
| RH | JAN | 14,273,723 | 74,651 | 191.2 | 22.9 | 168.3 | 1268 | 1253 | 189.2 | 14,125,075 | (15) | (148,648) |
| RH | FEB | 15,249,979 | 74,712 | 204.1 | 22.9 | 181.2 | 1399 | 1220 | 180.9 | 13,517,484 | (179) | (1,732,496) |
| RH | MAR | 11,221,253 | 74,705 | 150.2 | 22.9 | 127.3 | 937 | 1009 | 160.0 | 11,952,165 | 72 | 730,912 |
| RH | APR | 8,765,823 | 74,107 | 118.3 | 22.9 | 95.4 | 790 | 749 | 113.3 | 8,398,885 | (41) | (366,937) |
| RH | MAY | 3,759,535 | 73,339 | 51.3 | 22.9 | 28.4 | 277 | 344 | 58.1 | 4,263,011 | 67 | 503,477 |
| RH | JUN | 2,327,459 | 73,057 | 31.9 | 22.9 | 9.0 | 118 | 125 | 32.4 | 2,366,369 | 7 | 38,910 |
| RH | JUL | 1,813,671 | 72,813 | 24.9 | 24.9 | - | - | - | 24.9 | 1,813,671 | - | - |
| RH | AUG | 1,621,353 | 72,741 | 22.3 | 22.3 | - | - | - | 22.3 | 1,621,353 | - | - |
| RH | SEP | 1,706,925 | 72,726 | 23.5 | 22.9 | 0.6 | 28 | 49 | 23.8 | 1,728,402 | 21 | 21,477 |
| RH | OCT | 2,685,530 | 72,899 | 36.8 | 22.9 | 14.0 | 262 | 266 | 37.1 | 2,701,066 | 4 | 15,536 |
| RH | NOV | 6,053,801 | 73,596 | 82.3 | 22.9 | 59.4 | 618 | 571 | 77.7 | 5,721,460 | (47) | (332,340) |
| RH | DEC | 9,870,317 | 73,205 | 134.8 | 22.9 | 112.0 | 925 | 968 | 140.0 | 10,251,292 | 43 | 380,975 |
| | Annual | 79,349,369 | | 1,071.5 | | | 6622 | 6554 | 1,059.8 | 78,460,333 | -68 | (889,136) |

| | | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|----------------------|--------|----------------------|--------|--------------|-------------|-----------|-----------------|------------|----------------|--------|-----------------------------|--------|
| | | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms |
| Residential Non-Heat | | | | | | | | | | | | |
| RNH | JAN | 304,246 | 15,041 | 20.2 | 13.1 | 13.1 | 1268 | 1253 | 304,246 | | (15) | - |
| RNH | FEB | 300,281 | 15,056 | 19.9 | 13.1 | 13.1 | 1399 | 1220 | 300,281 | | (179) | - |
| RNH | MAR | 288,020 | 15,036 | 19.2 | 13.1 | 13.1 | 937 | 1009 | 288,020 | | 72 | - |
| RNH | APR | 341,361 | 15,571 | 21.9 | 13.1 | 13.1 | 790 | 749 | 341,361 | | (41) | - |
| RNH | MAY | 257,139 | 15,947 | 16.1 | 13.1 | 13.1 | 277 | 344 | 257,139 | | 67 | - |
| RNH | JUN | 243,916 | 15,967 | 15.3 | 13.1 | 13.1 | 118 | 125 | 243,916 | | 7 | - |
| RNH | JUL | 221,716 | 15,911 | 13.9 | 13.9 | - | - | - | 221,716 | | - | - |
| RNH | AUG | 205,577 | 15,871 | 13.0 | 13.0 | - | - | - | 205,577 | | - | - |
| RNH | SEP | 207,971 | 15,801 | 13.2 | 13.1 | 13.1 | 28 | 49 | 207,971 | | 21 | - |
| RNH | OCT | 230,006 | 15,728 | 14.6 | 13.1 | 13.1 | 262 | 266 | 230,006 | | 4 | - |
| RNH | NOV | 257,420 | 15,632 | 16.5 | 13.1 | 13.1 | 618 | 571 | 257,420 | | (47) | - |
| RNH | DEC | 311,436 | 15,339 | 20.3 | 13.1 | 13.1 | 925 | 968 | 311,436 | | 43 | - |
| | Annual | 3,169,089 | | 204.1 | | | 6622 | 6554 | 3,169,089 | | -68 | 0 |

| | | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|------------------|--------|----------------------|-------|--------------|-------------|-----------|-----------------|------------|----------------|------------|-----------------------------|-----------|
| | | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms |
| C&I Heat Low/Med | | | | | | | | | | | | |
| G/T 40, 41 | | | | | | | | | | | | |
| Hi Lo, Md | JAN | 5,050,692 | 6,870 | 735.2 | 49.9 | 685.3 | 1268 | 1253 | 727.1 | 4,995,001 | (15) | (55,691) |
| Hi Lo, Md | FEB | 5,779,957 | 6,867 | 841.7 | 49.9 | 791.8 | 1399 | 1220 | 740.4 | 5,084,282 | (179) | (695,676) |
| Hi Lo, Md | MAR | 3,806,915 | 6,853 | 555.5 | 49.9 | 505.6 | 937 | 1009 | 594.4 | 4,073,154 | 72 | 266,239 |
| Hi Lo, Md | APR | 2,834,114 | 6,827 | 415.1 | 49.9 | 365.2 | 790 | 749 | 396.2 | 2,704,714 | (41) | (129,399) |
| Hi Lo, Md | MAY | 890,405 | 6,760 | 131.7 | 49.9 | 81.8 | 277 | 344 | 151.5 | 1,024,149 | 67 | 133,744 |
| Hi Lo, Md | JUN | 525,481 | 6,734 | 78.0 | 49.9 | 28.1 | 118 | 125 | 79.7 | 536,711 | 7 | 11,231 |
| Hi Lo, Md | JUL | 331,722 | 6,702 | 49.5 | 49.5 | - | - | - | 49.5 | 331,722 | - | - |
| Hi Lo, Md | AUG | 342,278 | 6,697 | 51.1 | 51.1 | - | - | - | 51.1 | 342,278 | - | - |
| Hi Lo, Md | SEP | 338,570 | 6,725 | 50.3 | 49.9 | 0.4 | 28 | 49 | 50.6 | 339,997 | 21 | 1,427 |
| Hi Lo, Md | OCT | 666,975 | 6,664 | 100.1 | 49.9 | 50.2 | 262 | 266 | 100.9 | 672,079 | 4 | 5,104 |
| Hi Lo, Md | NOV | 1,816,652 | 6,749 | 269.2 | 49.9 | 219.3 | 618 | 571 | 252.5 | 1,704,115 | (47) | (112,537) |
| Hi Lo, Md | DEC | 3,309,646 | 6,726 | 492.1 | 49.9 | 442.1 | 925 | 968 | 512.6 | 3,447,891 | 43 | 138,245 |
| | Annual | 25,693,406 | | 3,769.6 | | | 6622 | 6554 | 3,706.3 | 25,236,094 | -68 | (437,312) |

Bay State Gas Billing Month Normalization of Volume for Weather
Springfield Division
2004

| C&I Non Ht Low/Med G/T 50, 51 | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|----------------------------------|----------------------|-----------|-----------------|----------------|--------------|-----------------|---------------|----------------|--------|-----------------------------|--------|
| | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms |
| | | | | | | | | | | | |
| NH Lo, Md | JAN | 1,012,403 | 1,775 | 570.4 | 328.2 | 1268 | 1253 | 1,012,403 | (15) | - | - |
| NH Lo, Md | FEB | 1,041,218 | 1,777 | 583.9 | 328.2 | 1399 | 1220 | 1,041,218 | (179) | - | - |
| NH Lo, Md | MAR | 916,500 | 1,767 | 518.7 | 328.2 | 937 | 1009 | 916,500 | 72 | - | - |
| NH Lo, Md | APR | 852,095 | 1,763 | 483.3 | 328.2 | 790 | 749 | 852,095 | (41) | - | - |
| NH Lo, Md | MAY | 614,799 | 1,758 | 349.7 | 328.2 | 277 | 344 | 614,799 | 67 | - | - |
| NH Lo, Md | JUN | 645,881 | 1,744 | 370.3 | 328.2 | 118 | 125 | 645,881 | 7 | - | - |
| NH Lo, Md | JUL | 640,558 | 1,738 | 368.6 | 328.2 | - | - | 640,558 | - | - | - |
| NH Lo, Md | AUG | 571,401 | 1,745 | 327.5 | 327.5 | - | - | 571,401 | - | - | - |
| NH Lo, Md | SEP | 574,578 | 1,747 | 328.9 | 328.2 | 28 | 49 | 574,578 | 21 | - | - |
| NH Lo, Md | OCT | 612,625 | 1,920 | 319.1 | 319.1 | 262 | 266 | 612,625 | 4 | - | - |
| NH Lo, Md | NOV | 831,844 | 1,929 | 431.2 | 328.2 | 618 | 571 | 831,844 | (47) | - | - |
| NH Lo, Md | DEC | 1,005,694 | 1,904 | 528.2 | 328.2 | 925 | 968 | 1,005,694 | 43 | - | - |
| Annual | | 9,319,596 | | 5,181.8 | | 6622 | 6554 | 9,319,596 | -68 | | 0 |

| C&I Heat LG & XLG G/T 42, 43 | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | | |
|---------------------------------|----------------------|------------|-----------------|----------------|--------------|-----------------|---------------|----------------|----------|-----------------------------|-----------|-----------|
| | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms | |
| | | | | | | | | | | | | 3=1/2 |
| H LG, XLG | JAN | 2,928,828 | 194 | 15,097.1 | 1,433.3 | 13,663.7 | 1268 | 1253 | 14,935.4 | 2,897,470 | (15) | (31,358) |
| H LG, XLG | FEB | 3,237,614 | 194 | 16,688.7 | 1,433.3 | 15,255.4 | 1399 | 1220 | 14,736.8 | 2,858,944 | (179) | (378,670) |
| H LG, XLG | MAR | 2,349,092 | 194 | 12,108.7 | 1,433.3 | 10,675.4 | 937 | 1009 | 12,929.0 | 2,508,232 | 72 | 159,140 |
| H LG, XLG | APR | 1,894,801 | 194 | 9,767.0 | 1,433.3 | 8,333.7 | 790 | 749 | 9,334.5 | 1,810,894 | (41) | (83,907) |
| H LG, XLG | MAY | 781,633 | 194 | 4,029.0 | 1,433.3 | 2,595.7 | 277 | 344 | 4,656.9 | 903,435 | 67 | 121,802 |
| H LG, XLG | JUN | 447,452 | 194 | 2,306.5 | 1,433.3 | 873.1 | 118 | 125 | 2,358.3 | 457,501 | 7 | 10,049 |
| H LG, XLG | JUL | 282,990 | 194 | 1,458.7 | 1,458.7 | - | - | 1,458.7 | 282,990 | - | - | - |
| H LG, XLG | AUG | 273,135 | 194 | 1,407.9 | 1,407.9 | - | - | 1,407.9 | 273,135 | - | - | - |
| H LG, XLG | SEP | 399,689 | 195 | 2,049.7 | 1,433.3 | 616.4 | 28 | 49 | 2,357.9 | 459,786 | 21 | 60,097 |
| H LG, XLG | OCT | 501,965 | 148 | 3,391.7 | 1,433.3 | 1,958.3 | 262 | 266 | 3,421.6 | 506,390 | 4 | 4,425 |
| H LG, XLG | NOV | 1,071,224 | 148 | 7,238.0 | 1,433.3 | 5,804.7 | 618 | 571 | 6,796.5 | 1,005,888 | (47) | (65,336) |
| H LG, XLG | DEC | 1,658,563 | 147 | 11,282.7 | 1,433.3 | 9,849.4 | 925 | 968 | 11,740.6 | 1,725,869 | 43 | 67,306 |
| Annual | | 15,826,986 | | 86,825.7 | | 6622 | 6554 | 15,826,986 | -68 | | (136,452) | |

| C&I Non-Ht LG & XLG G/T 52, 53 | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | | |
|-----------------------------------|----------------------|------------|-----------------|----------------|--------------|-----------------|---------------|----------------|-----------|-----------------------------|--------|-------|
| | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms | |
| | | | | | | | | | | | | 3=1/2 |
| NH LG, XLG | JAN | 2,685,320 | 112 | 23,976.1 | 19,949.3 | 19,949.3 | 1268 | 1253 | 19,949.3 | 2,685,320 | (15) | - |
| NH LG, XLG | FEB | 2,999,892 | 112 | 26,784.8 | 19,949.3 | 19,949.3 | 1399 | 1220 | 19,949.3 | 2,999,892 | (179) | - |
| NH LG, XLG | MAR | 2,583,261 | 112 | 23,064.8 | 19,949.3 | 19,949.3 | 937 | 1009 | 23,064.8 | 2,583,261 | 72 | - |
| NH LG, XLG | APR | 2,534,117 | 110 | 23,037.4 | 19,949.3 | 19,949.3 | 790 | 749 | 2,534,117 | 2,534,117 | (41) | - |
| NH LG, XLG | MAY | 2,164,217 | 110 | 19,674.7 | 19,674.7 | 19,674.7 | 277 | 344 | 2,164,217 | 2,164,217 | 67 | - |
| NH LG, XLG | JUN | 2,056,367 | 109 | 18,865.8 | 18,865.8 | 18,865.8 | 118 | 125 | 2,056,367 | 2,056,367 | 7 | - |
| NH LG, XLG | JUL | 2,181,816 | 109 | 20,016.7 | 20,016.7 | 20,016.7 | - | - | 2,181,816 | 2,181,816 | - | - |
| NH LG, XLG | AUG | 2,167,141 | 109 | 19,882.0 | 19,882.0 | 19,882.0 | - | - | 2,167,141 | 2,167,141 | - | - |
| NH LG, XLG | SEP | 2,334,338 | 110 | 21,221.3 | 19,949.3 | 19,949.3 | 28 | 49 | 2,334,338 | 2,334,338 | 21 | - |
| NH LG, XLG | OCT | 2,138,110 | 124 | 17,242.8 | 17,242.8 | 17,242.8 | 262 | 266 | 2,138,110 | 2,138,110 | 4 | - |
| NH LG, XLG | NOV | 3,103,873 | 127 | 24,439.9 | 19,949.3 | 19,949.3 | 618 | 571 | 3,103,873 | 3,103,873 | (47) | - |
| NH LG, XLG | DEC | 2,706,335 | 126 | 21,478.8 | 19,949.3 | 19,949.3 | 925 | 968 | 2,706,335 | 2,706,335 | 43 | - |
| Annual | | 29,654,787 | | 259,685.1 | | 6622 | 6554 | 29,654,787 | -68 | | 0 | |

| Total | Actual Billing Month | | | | | Weather Billing | | Normal Billing | | Normal v Actual Billing Mo. | |
|--------|----------------------|--------|-----------------|----------------|--------------|-----------------|---------------|----------------|-------------|-----------------------------|--------|
| | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | Therms |
| | | | | | | | | | | | |
| JAN | 26,255,211 | 98,643 | | | | | | | 26,019,515 | | |
| FEB | 28,608,942 | 98,718 | | | | | | | 25,802,100 | | |
| MAR | 21,165,042 | 98,667 | | | | | | | 22,321,332 | | |
| APR | 17,222,310 | 98,572 | | | | | | | 16,642,067 | | |
| MAY | 8,467,728 | 98,108 | | | | | | | 9,226,751 | | |
| JUN | 6,246,556 | 97,805 | | | | | | | 6,306,745 | | |
| JUL | 5,472,473 | 97,467 | | | | | | | 5,472,473 | | |
| AUG | 5,180,885 | 97,357 | | | | | | | 5,180,885 | | |
| SEP | 5,562,071 | 97,304 | | | | | | | 5,645,071 | | |
| OCT | 6,835,211 | 97,483 | | | | | | | 6,860,276 | | |
| NOV | 13,134,814 | 98,181 | | | | | | | 12,624,601 | | |
| DEC | 18,861,891 | 97,447 | | | | | | | 19,448,517 | | |
| Annual | 163,013,332 | | | | | | | | 161,550,333 | | |

Bay State Gas Billing Month Normalization of Volume for Weather
Springfield Division
2004

| | | 22 | 23 | 24 | 25 | 26=20+ 21*(25/24) | 27=18*26 | 28=25-24 | 29=27-17 | 30= (20*(23/22))-20*18 | 31=29+30 |
|------------------|-----|------------------|--------------|---------------|---------------|----------------------|------------|-----------------|----------------------|----------------------------|---------------------|
| Residential Heat | | Weather Calendar | | | | Normal Calendar | | Normal v Actual | | | |
| | | 2004 Days | 2005 Days | EDD Actual | EDD Normal | Tb/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj |
| RH | JAN | 31.00 | 31.00 | 1571 | 1283 | 194.8 | 14,542,637 | -288 | (2,878,529) | - | (2,878,529) |
| RH | FEB | 29.00 | 28.25 | 1086 | 1090 | 166.1 | 12,406,769 | 4 | 39,628 | (41,593) | (1,966) |
| RH | MAR | 31.00 | 31.00 | 885 | 910 | 138.9 | 10,373,796 | 25 | 237,764 | - | 237,764 |
| RH | APR | 30.00 | 30.00 | 506 | 522 | 81.8 | 6,064,888 | 16 | 134,901 | - | 134,901 |
| RH | MAY | 31.00 | 31.00 | 170 | 214 | 42.6 | 3,125,405 | 44 | 289,128 | - | 289,128 |
| RH | JUN | 30.00 | 30.00 | 48 | 45 | 25.3 | 1,851,334 | -3 | (12,507) | - | (12,507) |
| RH | JUL | 31.00 | 31.00 | - | - | 23.6 | 1,719,189 | - | - | - | - |
| RH | AUG | 31.00 | 31.00 | - | - | 23.6 | 1,719,189 | - | (4,602) | - | (4,602) |
| RH | SEP | 30.00 | 30.00 | 84 | 121 | 28.2 | 2,049,066 | 37 | 117,830 | - | 117,830 |
| RH | OCT | 31.00 | 31.00 | 481 | 446 | 58.6 | 4,272,984 | -35 | (200,410) | - | (200,410) |
| RH | NOV | 30.00 | 30.00 | 744 | 750 | 104.7 | 7,704,472 | 6 | 48,326 | - | 48,326 |
| RH | DEC | 31.00 | 31.00 | 1127 | 1121 | 168.0 | 12,294,917 | -6 | (56,605) | - | (56,605) |
| | | 366.00 | 365.25 | 6702 | 6502 | 1,056.2 | 78,124,648 | -200 | (2,285,076) | (41,593) | (2,326,670) |

| | | 22 | 23 | 24 | 25 | 26=20+ 21*(25/24) | 27=17 | 28=25-24 | 29=27-17 | 30= (19*(23/22))-19*18 | 31=29+30 |
|----------------------|-----|------------------|--------------|---------------|---------------|----------------------|-----------|-----------------|----------------------|----------------------------|---------------------|
| Residential Non-Heat | | Weather Calendar | | | | Normal Calendar | | Normal v Actual | | | |
| | | 2004 Days | 2005 Days | EDD Actual | EDD Normal | Tb/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj |
| RNH | JAN | 31.00 | 31.00 | 1571 | 1283 | - | 349,099 | -288 | - | - | - |
| RNH | FEB | 29.00 | 28.25 | 1086 | 1090 | - | 314,432 | 4 | - | (8,132) | (8,132) |
| RNH | MAR | 31.00 | 31.00 | 885 | 910 | - | 308,004 | 25 | - | - | - |
| RNH | APR | 30.00 | 30.00 | 506 | 522 | - | 258,555 | 16 | - | - | - |
| RNH | MAY | 31.00 | 31.00 | 170 | 214 | - | 231,323 | 44 | - | - | - |
| RNH | JUN | 30.00 | 30.00 | 48 | 45 | - | 206,002 | -3 | - | - | - |
| RNH | JUL | 31.00 | 31.00 | - | - | - | 207,745 | - | - | - | - |
| RNH | AUG | 31.00 | 31.00 | - | - | - | 207,745 | - | - | - | - |
| RNH | SEP | 30.00 | 30.00 | 84 | 121 | - | 214,375 | 37 | - | - | - |
| RNH | OCT | 31.00 | 31.00 | 481 | 446 | - | 256,883 | -35 | - | - | - |
| RNH | NOV | 30.00 | 30.00 | 744 | 750 | - | 283,675 | 6 | - | - | - |
| RNH | DEC | 31.00 | 31.00 | 1127 | 1121 | - | 331,251 | -6 | - | - | - |
| | | 366.00 | 365.25 | 6702 | 6502 | - | 3,169,089 | -200 | - | (8,132) | (8,132) |

| | | 22 | 23 | 24 | 25 | 26=20+ 21*(25/24) | 27=18*26 | 28=25-24 | 29=27-17 | 30= (20*(23/22))-20*18 | 31=29+30 |
|------------------|-----|------------------|--------------|---------------|---------------|----------------------|------------|-----------------|----------------------|----------------------------|---------------------|
| C&I Heat Low/Med | | Weather Calendar | | | | Normal Calendar | | Normal v Actual | | | |
| | | 2004 Days | 2005 Days | EDD Actual | EDD Normal | Tb/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj |
| Hi Lo, Md | JAN | 31.00 | 31.00 | 1571 | 1283 | 775.2 | 5,325,899 | -288 | (1,118,394) | - | (1,118,394) |
| Hi Lo, Md | FEB | 29.00 | 28.25 | 1086 | 1090 | 649.3 | 4,458,487 | 4 | 15,182 | (8,314) | 6,867 |
| Hi Lo, Md | MAR | 31.00 | 31.00 | 885 | 910 | 502.8 | 3,445,728 | 25 | 85,222 | - | 85,222 |
| Hi Lo, Md | APR | 30.00 | 30.00 | 506 | 522 | 257.4 | 1,757,149 | 16 | 43,665 | - | 43,665 |
| Hi Lo, Md | MAY | 31.00 | 31.00 | 170 | 214 | 108.0 | 730,395 | 44 | 79,516 | - | 79,516 |
| Hi Lo, Md | JUN | 30.00 | 30.00 | 48 | 45 | 57.4 | 386,718 | -3 | (3,610) | - | (3,610) |
| Hi Lo, Md | JUL | 31.00 | 31.00 | - | - | 51.3 | 343,656 | - | - | - | - |
| Hi Lo, Md | AUG | 31.00 | 31.00 | - | - | 51.3 | 343,656 | - | (306) | - | (306) |
| Hi Lo, Md | SEP | 30.00 | 30.00 | 84 | 121 | 66.1 | 444,685 | 37 | 34,283 | - | 34,283 |
| Hi Lo, Md | OCT | 31.00 | 31.00 | 481 | 446 | 180.2 | 1,201,038 | -35 | (67,283) | - | (67,283) |
| Hi Lo, Md | NOV | 30.00 | 30.00 | 744 | 750 | 365.4 | 2,465,809 | 6 | 17,066 | - | 17,066 |
| Hi Lo, Md | DEC | 31.00 | 31.00 | 1127 | 1121 | 632.2 | 4,251,880 | -6 | (20,918) | - | (20,918) |
| | | 366.00 | 365.25 | 6702 | 6502 | 3,696.6 | 25,155,101 | -200 | (935,567) | (8,314) | (943,881) |

Bay State Gas Billing Month Normalization of Volume for Weather
Springfield Division
2004

| | | 13=Annual 12 Allocated by | | | | 14=1-12 | | 15=14/6 | | 15a | 15b | 15c= 15a * 15 next | 15d= 15b * 15 | 16 = 15c - 15d | 17=1+16 | 18=2 | 19=17/18 | 20=13/18 | 21=19-20 |
|------------------|--------|---------------------------|----------------------|---------------|------------|--------------|----------------|---------------------|------------------------|------------------------|------------|--------------------|---------------|----------------|-----------|------|----------|----------|----------|
| | | Billing Thermo Base | Calendar Thermo Base | Billing Month | | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | | | | |
| | | | | Therms | TS Th/ EDD | | | | | | | | | | | | | | |
| Residential Heat | | | | | | | | | | | | | | | | | | | |
| RH | JAN | 1,708,016 | 1,719,189 | 12,565,707 | 9,910 | 837 | 501 | 8,101,112 | 4,964,842 | 3,136,270 | 17,421,166 | 74,651 | 233.4 | 23.0 | 210.3 | | | | |
| RH | FEB | 1,709,412 | 1,608,274 | 13,540,568 | 9,679 | 524 | 837 | 5,319,412 | 8,101,112 | (2,781,700) | 12,367,142 | 74,712 | 165.5 | 21.5 | 144.0 | | | | |
| RH | MAR | 1,709,251 | 1,719,189 | 9,512,002 | 10,152 | 472 | 524 | 4,224,253 | 5,319,412 | (1,095,159) | 10,136,032 | 74,705 | 135.7 | 23.0 | 112.7 | | | | |
| RH | APR | 1,695,569 | 1,663,732 | 7,070,253 | 8,950 | 189 | 472 | 1,420,255 | 4,224,253 | (2,803,998) | 5,929,987 | 74,107 | 80.0 | 22.5 | 57.6 | | | | |
| RH | MAY | 1,677,997 | 1,719,189 | 2,081,537 | 7,515 | 82 | 189 | 455,805 | 1,420,255 | (964,450) | 2,836,277 | 73,339 | 38.7 | 23.4 | 15.2 | | | | |
| RH | JUN | 1,671,545 | 1,663,732 | 655,914 | 5,559 | 11 | 82 | - | 455,805 | (455,805) | 1,863,841 | 73,057 | 25.5 | 22.8 | 2.7 | | | | |
| RH | JUL | 1,813,671 | 1,719,189 | | | 1 | 11 | - | 0 | 0 | 1,719,189 | 72,813 | 23.7 | 23.6 | 0.1 | | | | |
| RH | AUG | 1,621,353 | 1,719,189 | | | 3 | 1 | 4,602 | 0 | 4,602 | 1,723,791 | 72,726 | 26.6 | 22.9 | 3.7 | | | | |
| RH | SEP | 1,663,972 | 1,663,732 | 42,953 | 1,534 | 59 | 3 | 229,154 | 4,602 | 224,552 | 1,931,237 | 72,741 | 31.4 | 23.6 | 7.8 | | | | |
| RH | OCT | 1,667,930 | 1,719,189 | 1,017,600 | 3,884 | 278 | 59 | 1,965,758 | 229,154 | 1,736,604 | 4,473,393 | 72,726 | 61.4 | 23.6 | 37.8 | | | | |
| RH | NOV | 1,683,878 | 1,663,732 | 4,369,923 | 7,071 | 405 | 278 | 3,588,250 | 1,965,758 | 1,622,491 | 7,656,146 | 73,596 | 104.0 | 22.6 | 81.4 | | | | |
| RH | DEC | 1,674,931 | 1,719,189 | 8,195,386 | 8,860 | 608 | 405 | 6,025,197 | 3,588,250 | 2,436,947 | 12,351,522 | 73,205 | 168.7 | 23.5 | 145.2 | | | | |
| | Annual | 20,297,526 | | | | | | | | | 1,060,355 | 80,409,724 | | | 1,086.8 | | | | |

| | | 13=Annual 12 Allocated by | | | | 15=Annual 14 Allocated by | | | | 15c= 15a * 15 next | | 15d= 15b * 15 | 16 = 15c - 15d | 17=13+15 | 18=2 | 19=17/18 | 20=13/18 | 21=19-20 | |
|----------------------|--------|---------------------------|----------------------|---------------------------|----------------------------|---------------------------|----------------|---------------------|------------------------|------------------------|-----------|---------------|----------------|-------------|-----------|----------|----------|----------|--|
| | | Billing Thermo Base | Calendar Thermo Base | Billing Thermo above base | Calendar Thermo above base | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | | | | |
| | | | | | | | | | | | | | | | | | | | |
| Residential Non-Heat | | | | | | | | | | | | | | | | | | | |
| RNH | JAN | 196,397 | 207,745 | 107,849 | 141,354 | | | | | | 349,099 | 15,041 | 23.2 | | | | | | |
| RNH | FEB | 196,593 | 194,342 | 103,689 | 120,090 | | | | | | 314,432 | 15,056 | 20.9 | | | | | | |
| RNH | MAR | 196,332 | 207,745 | 91,688 | 100,259 | | | | | | 308,004 | 15,036 | 20.5 | | | | | | |
| RNH | APR | 203,317 | 201,044 | 138,043 | 57,511 | | | | | | 258,555 | 15,571 | 16.6 | | | | | | |
| RNH | MAY | 208,227 | 207,745 | 48,912 | 23,577 | | | | | | 231,323 | 15,947 | 14.5 | | | | | | |
| RNH | JUN | 208,488 | 201,044 | 35,428 | 4,958 | | | | | | 206,002 | 15,967 | 12.9 | | | | | | |
| RNH | JUL | 221,716 | 207,745 | - | - | | | | | | 207,745 | 15,911 | 13.1 | | | | | | |
| RNH | AUG | 205,577 | 207,745 | - | - | | | | | | 207,745 | 15,871 | 13.1 | | | | | | |
| RNH | SEP | 206,321 | 201,044 | 1,650 | 13,331 | | | | | | 207,745 | 15,801 | 13.6 | | | | | | |
| RNH | OCT | 205,367 | 207,745 | 24,639 | 49,138 | | | | | | 256,883 | 15,728 | 16.3 | | | | | | |
| RNH | NOV | 204,114 | 201,044 | 53,306 | 82,631 | | | | | | 283,675 | 15,632 | 18.1 | | | | | | |
| RNH | DEC | 200,288 | 207,745 | 111,148 | 123,505 | | | | | | 331,251 | 15,339 | 21.6 | | | | | | |
| | Annual | 2,452,736 | | 716,353 | | | | | | | 3,169,089 | | | | | | | | |

| | | 13=Annual 12 Allocated by | | | | 14=1-12 | | 15=14/6 | | 15a | 15b | 15c= 15a * 15 next | 15d= 15b * 15 | 16 = 15c - 15d | 17=1+16 | 18=2 | 19=17/18 | 20=13/18 | 21=19-20 |
|------------------|--------|---------------------------|----------------------|---------------|------------|--------------|----------------|---------------------|------------------------|------------------------|-----------|--------------------|---------------|----------------|-----------|------|----------|----------|----------|
| | | Billing Thermo Base | Calendar Thermo Base | Billing Month | | Unbilled EDD | Unbilled EDD-1 | Unbilled TS Balance | Unbilled TS Balance -1 | Net Unbilled TS Therms | Therms | Custs | Th/Cus Total | Th/Cus Base | Th/Cus TS | | | | |
| | | | | Therms | TS Th/ EDD | | | | | | | | | | | | | | |
| C&I Heat Low/Med | | | | | | | | | | | | | | | | | | | |
| G/T 40, 41 | | | | | | | | | | | | | | | | | | | |
| Hi Lo, Md | JAN | 342,954 | 343,656 | 4,707,739 | 3,713 | 837 | 501 | 3,252,965 | 1,860,077 | 1,392,888 | 6,444,283 | 6,870 | 938.0 | 50.0 | 888.0 | | | | |
| Hi Lo, Md | FEB | 342,804 | 321,485 | 5,437,154 | 3,886 | 524 | 837 | 1,937,631 | 3,252,965 | (1,315,333) | 4,443,305 | 6,867 | 647.1 | 46.8 | 600.2 | | | | |
| Hi Lo, Md | MAR | 342,105 | 343,656 | 3,464,810 | 3,698 | 472 | 524 | 1,489,672 | 1,937,631 | (447,960) | 3,360,507 | 6,853 | 490.4 | 50.1 | 440.2 | | | | |
| Hi Lo, Md | APR | 340,807 | 332,570 | 2,493,307 | 3,156 | 189 | 472 | 377,279 | 1,489,672 | (1,112,393) | 1,713,484 | 6,827 | 251.0 | 48.7 | 202.3 | | | | |
| Hi Lo, Md | MAY | 337,462 | 343,656 | 552,943 | 1,996 | 82 | 189 | 131,559 | 377,279 | (245,720) | 650,879 | 6,760 | 96.3 | 50.8 | 45.4 | | | | |
| Hi Lo, Md | JUN | 336,164 | 332,570 | 189,316 | 1,604 | 11 | 82 | - | 131,559 | (131,559) | 390,328 | 6,734 | 58.0 | 49.4 | 8.6 | | | | |
| Hi Lo, Md | JUL | 331,722 | 343,656 | | | 1 | 11 | - | 0 | 0 | 343,656 | 6,702 | 51.3 | 51.3 | 0.0 | | | | |
| Hi Lo, Md | AUG | 342,278 | 343,656 | | | 3 | 1 | 306 | 0 | 306 | 343,962 | 6,697 | 51.4 | 51.3 | 0.1 | | | | |
| Hi Lo, Md | SEP | 335,715 | 332,570 | 2,855 | 102 | 59 | 3 | 75,282 | 306 | 74,977 | 410,402 | 6,725 | 61.0 | 49.5 | 11.6 | | | | |
| Hi Lo, Md | OCT | 332,670 | 343,656 | 334,305 | 1,276 | 278 | 59 | 665,643 | 75,282 | 590,360 | 1,268,322 | 6,664 | 190.3 | 51.6 | 138.8 | | | | |
| Hi Lo, Md | NOV | 336,913 | 332,570 | 1,479,738 | 2,394 | 405 | 278 | 1,302,078 | 665,643 | 636,435 | 2,448,744 | 6,749 | 362.8 | 49.3 | 313.6 | | | | |
| Hi Lo, Md | DEC | 335,765 | 343,656 | 2,973,881 | 3,215 | 608 | 405 | 2,257,338 | 1,302,078 | 955,261 | 4,272,798 | 6,726 | 635.3 | 51.1 | 584.2 | | | | |
| | Annual | 4,057,359 | | | | | | | | | 397,362 | 26,090,668 | | | 3,832.8 | | | | |

Bay State Gas Billing Month Normalisation of Volume for Weather
Springfield Division
 2004

Witness: J.A. Ferro
 D.T.R. 05-27
 Exhibit BSG/JAF-1
 Schedule JAF-1-6
 Page 2
 Sheet 3

| C&I Non Ht Low/Med G/T 50, 51 | 22 | | 23 | | 24 | | 25 | | 26=20+ 21*(25/24) | | 27=17 | 28=25-24 | 29=27-17 | 30= ((19*(23/22))-19)*18 | | 31=29+30 | |
|----------------------------------|------------------|---------------|-----------------|-------------|-----------------|------------------|-------------|-------------------|-------------------------|------------------|----------|----------|----------|-----------------------------|----------|-----------------|--|
| | Weather Calendar | | Normal Calendar | | Normal v Actual | | Total | | | | | | | | | | |
| | 2004 Days | 2005 Days | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj | | | | | | | |
| NH Lo, Md SEP | 31.00 | 31.00 | 1571 | 1283 | - | 1,036,061 | -288 | - | - | - | - | - | - | - | - | - | |
| NH Lo, Md OCT | 29.00 | 28.25 | 1086 | 1090 | - | 932,085 | 4 | - | (24,106) | - | - | - | - | - | - | (24,106) | |
| NH Lo, Md NOV | 31.00 | 31.00 | 885 | 910 | - | 910,403 | 25 | - | - | - | - | - | - | - | - | - | |
| NH Lo, Md DEC | 30.00 | 30.00 | 506 | 522 | - | 760,212 | 16 | - | - | - | - | - | - | - | - | - | |
| NH Lo, Md JAN | 31.00 | 31.00 | 170 | 214 | - | 675,930 | 44 | - | - | - | - | - | - | - | - | - | |
| NH Lo, Md FEB | 30.00 | 30.00 | 48 | 45 | - | 599,517 | -3 | - | - | - | - | - | - | - | - | - | |
| NH Lo, Md MAR | 31.00 | 31.00 | - | - | - | 603,836 | - | - | - | - | - | - | - | - | - | - | |
| NH Lo, Md APR | 31.00 | 31.00 | - | - | - | 603,836 | - | - | - | - | - | - | - | - | - | - | |
| NH Lo, Md MAY | 30.00 | 30.00 | 84 | 121 | - | 625,121 | 37 | - | - | - | - | - | - | - | - | - | |
| NH Lo, Md JUN | 31.00 | 31.00 | 481 | 446 | - | 754,087 | -35 | - | - | - | - | - | - | - | - | - | |
| NH Lo, Md JUL | 30.00 | 30.00 | 744 | 750 | - | 837,022 | 6 | - | - | - | - | - | - | - | - | - | |
| NH Lo, Md AUG | 31.00 | 31.00 | 1127 | 1121 | - | 981,486 | -6 | - | - | - | - | - | - | - | - | - | |
| Total | 366.00 | 365.25 | 6702 | 6502 | - | 9,319,596 | -200 | - | (24,106) | - | - | - | - | - | - | (24,106) | |

| C&I Heat LG & XLG G/T 42, 43 | 22 | | 23 | | 24 | | 25 | | 26=20+ 21*(25/24) | | 27=18*26 | 28=25-24 | 29=27-17 | 30= ((20*(23/22))-20)*18 | | 31=29+30 | |
|---------------------------------|------------------|---------------|-----------------|-------------|-----------------|-------------------|-------------|-------------------|-------------------------|------------------|----------|----------|----------|-----------------------------|----------|------------------|--|
| | Weather Calendar | | Normal Calendar | | Normal v Actual | | Total | | | | | | | | | | |
| | 2004 Days | 2005 Days | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj | | | | | | | |
| H LG, XLG JAN | 31.00 | 31.00 | 1571 | 1283 | 15,574.2 | 3,021,397 | -288 | (618,544) | - | - | - | - | - | - | - | (618,544) | |
| H LG, XLG FEB | 29.00 | 28.25 | 1086 | 1090 | 13,425.0 | 2,604,443 | 4 | 8,645 | (6,432) | - | - | - | - | - | - | 2,213 | |
| H LG, XLG MAR | 31.00 | 31.00 | 885 | 910 | 11,328.5 | 2,197,735 | 25 | 53,073 | - | - | - | - | - | - | - | 53,073 | |
| H LG, XLG APR | 30.00 | 30.00 | 506 | 522 | 6,614.0 | 1,283,114 | 16 | 31,443 | - | - | - | - | - | - | - | 31,443 | |
| H LG, XLG MAY | 31.00 | 31.00 | 170 | 214 | 3,172.3 | 615,431 | 44 | 71,873 | - | - | - | - | - | - | - | 71,873 | |
| H LG, XLG JUN | 30.00 | 30.00 | 48 | 45 | 1,576.0 | 305,739 | -3 | (3,230) | - | - | - | - | - | - | - | (3,230) | |
| H LG, XLG JUL | 31.00 | 31.00 | - | - | 1,370.5 | 265,868 | - | - | - | - | - | - | - | - | - | - | |
| H LG, XLG AUG | 31.00 | 31.00 | - | - | 1,370.5 | 265,868 | - | (12,878) | - | - | - | - | - | - | - | (12,878) | |
| H LG, XLG SEP | 30.00 | 30.00 | 84 | 121 | 2,594.3 | 505,894 | 37 | 76,019 | - | - | - | - | - | - | - | 76,019 | |
| H LG, XLG OCT | 31.00 | 31.00 | 481 | 446 | 5,624.5 | 832,427 | -35 | (44,461) | - | - | - | - | - | - | - | (44,461) | |
| H LG, XLG NOV | 30.00 | 30.00 | 744 | 750 | 9,275.6 | 1,372,786 | 6 | 8,924 | - | - | - | - | - | - | - | 8,924 | |
| H LG, XLG DEC | 31.00 | 31.00 | 1127 | 1121 | 15,916.5 | 2,339,733 | -6 | (11,100) | - | - | - | - | - | - | - | (11,100) | |
| Total | 366.00 | 365.25 | 6702 | 6502 | 87,841.9 | 15,610,434 | -200 | (440,236) | (6,432) | - | - | - | - | - | - | (446,669) | |

| C&I Non-Ht LG & XLG G/T 52, 53 | 22 | | 23 | | 24 | | 25 | | 26=20+ 21*(25/24) | | 27=17 | 28=25-24 | 29=27-17 | 30= ((19*(23/22))-19)*18 | | 31=29+30 | |
|-----------------------------------|------------------|---------------|-----------------|-------------|-----------------|-------------------|-------------|-------------------|-------------------------|------------------|----------|----------|----------|-----------------------------|----------|-----------------|--|
| | Weather Calendar | | Normal Calendar | | Normal v Actual | | Total | | | | | | | | | | |
| | 2004 Days | 2005 Days | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj | | | | | | | |
| NH LG, XLO JAN | 31.00 | 31.00 | 1571 | 1283 | - | 2,828,007 | -288 | - | - | - | - | - | - | - | - | - | |
| NH LG, XLO FEB | 29.00 | 28.25 | 1086 | 1090 | - | 2,597,950 | 4 | - | (67,188) | - | - | - | - | - | - | (67,188) | |
| NH LG, XLO MAR | 31.00 | 31.00 | 885 | 910 | - | 2,666,914 | 25 | - | - | - | - | - | - | - | - | - | |
| NH LG, XLO APR | 30.00 | 30.00 | 506 | 522 | - | 2,425,991 | 16 | - | - | - | - | - | - | - | - | - | |
| NH LG, XLO MAY | 31.00 | 31.00 | 170 | 214 | - | 2,366,322 | 44 | - | - | - | - | - | - | - | - | - | |
| NH LG, XLO JUN | 30.00 | 30.00 | 48 | 45 | - | 2,219,982 | -3 | - | - | - | - | - | - | - | - | - | |
| NH LG, XLO JUL | 31.00 | 31.00 | - | - | - | 2,273,898 | - | - | - | - | - | - | - | - | - | - | |
| NH LG, XLO AUG | 31.00 | 31.00 | - | - | - | 2,273,898 | - | - | - | - | - | - | - | - | - | - | |
| NH LG, XLO SEP | 30.00 | 30.00 | 84 | 121 | - | 2,252,805 | 37 | - | - | - | - | - | - | - | - | - | |
| NH LG, XLO OCT | 31.00 | 31.00 | 481 | 446 | - | 2,466,519 | -35 | - | - | - | - | - | - | - | - | - | |
| NH LG, XLO NOV | 30.00 | 30.00 | 744 | 750 | - | 2,524,461 | 6 | - | - | - | - | - | - | - | - | - | |
| NH LG, XLO DEC | 31.00 | 31.00 | 1127 | 1121 | - | 2,758,041 | -6 | - | - | - | - | - | - | - | - | - | |
| Total | 366.00 | 365.25 | 6702 | 6502 | - | 29,654,787 | -200 | - | (67,188) | - | - | - | - | - | - | (67,188) | |

| Total | 22 | | 23 | | 24 | | 25 | | 26=20+ 21*(25/24) | | 27=17 | 28=25-24 | 29=27-17 | 30= ((19*(23/22))-19)*18 | | 31=29+30 | |
|--------------|------------------|-----------|-----------------|------------|-----------------|--------------------|-------|-------------------|-------------------------|------------------|----------|----------|----------|-----------------------------|----------|-------------------|--|
| | Weather Calendar | | Normal Calendar | | Normal v Actual | | Total | | | | | | | | | | |
| | 2004 Days | 2005 Days | EDD Actual | EDD Normal | Th/Cus | Therms | EDD | 2004 Wx Therm Adj | Base Th from Days in Yr | Total Therms Adj | | | | | | | |
| JAN | | | | | | 27,103,101 | | (4,615,457) | - | - | - | - | - | - | - | (4,615,457) | |
| FEB | | | | | | 23,314,166 | | 63,454 | (155,766) | - | - | - | - | - | - | (92,312) | |
| MAR | | | | | | 19,902,580 | | 376,059 | - | - | - | - | - | - | - | 376,059 | |
| APR | | | | | | 12,549,909 | | 210,009 | - | - | - | - | - | - | - | 210,009 | |
| MAY | | | | | | 7,744,805 | | 440,518 | - | - | - | - | - | - | - | 440,518 | |
| JUN | | | | | | 5,569,292 | | (19,347) | - | - | - | - | - | - | - | (19,347) | |
| JUL | | | | | | 5,414,193 | | - | - | - | - | - | - | - | - | - | |
| AUG | | | | | | 5,414,193 | | (17,786) | - | - | - | - | - | - | - | (17,786) | |
| SEP | | | | | | 6,091,945 | | 228,131 | - | - | - | - | - | - | - | 228,131 | |
| OCT | | | | | | 9,783,938 | | (312,154) | - | - | - | - | - | - | - | (312,154) | |
| NOV | | | | | | 15,188,226 | | 74,316 | - | - | - | - | - | - | - | 74,316 | |
| DEC | | | | | | 22,957,307 | | (88,623) | - | - | - | - | - | - | - | (88,623) | |
| Total | | | | | | 161,033,634 | | -3,660,880 | -155,766 | - | - | - | - | - | - | -3,816,645 | |

BAY STATE GAS COMPANY

**Unbilled, Weather Normalization and Non-Temp Sensitive Billing Day
Volume Adjustments (Therms)**

Summary

| Division | Unbilled | Weather Normalization | Non-TS Billing Day |
|--------------------|------------------|----------------------------------|-------------------------------|
| Brockton | 2,691,925 | (7,839,803) | (190,022) |
| Lawrence | 943,945 | (2,492,826) | (103,898) |
| Springfield | <u>1,681,302</u> | <u>(3,660,880)</u> | <u>(155,766)</u> |
| TOTAL | 5,317,171 | (13,993,508) | (449,686) |

BROCKTON DIVISION

Bay State Gas Effective Heating Degree Days

Calendar EDD

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual | Days |
|--------------|-------|-------|-------|-------|-------|-------|-----|-----|--------|------|------|------|--------|--------|
| 1985 | 1461 | 1027 | 874 | 515 | 227 | 92 | 1 | 22 | 104 | 388 | 661 | 1168 | 6540 | 365 |
| 1986 | 1211 | 1134 | 873 | 547 | 276 | 85 | 22 | 34 | 141 | 438 | 787 | 1013 | 6561 | 365 |
| 1987 | 1251 | 1140 | 905 | 587 | 274 | 49 | 3 | 30 | 103 | 475 | 723 | 954 | 6194 | 365 |
| 1988 | 1302 | 1090 | 916 | 621 | 276 | 85 | 9 | 15 | 105 | 552 | 649 | 1126 | 6746 | 366 |
| 1989 | 1084 | 1094 | 962 | 641 | 224 | 51 | 3 | 11 | 115 | 375 | 759 | 1493 | 6812 | 365 |
| 1990 | 1007 | 988 | 878 | 594 | 345 | 54 | 10 | 9 | 120 | 300 | 647 | 892 | 5844 | 365 |
| 1991 | 1211 | 919 | 848 | 473 | 158 | 43 | 1 | 5 | 159 | 334 | 655 | 1027 | 5833 | 365 |
| 1992 | 1180 | 1070 | 993 | 647 | 321 | 38 | 19 | 13 | 137 | 466 | 738 | 1070 | 6992 | 366 |
| 1993 | 1177 | 1236 | 1026 | 536 | 176 | 46 | 1 | 1 | 139 | 455 | 701 | 1083 | 6577 | 365 |
| 1994 | 1503 | 1229 | 931 | 483 | 319 | 20 | 1 | 19 | 123 | 387 | 595 | 952 | 6562 | 365 |
| 1995 | 1052 | 1155 | 876 | 623 | 293 | 31 | 3 | 8 | 151 | 298 | 809 | 1227 | 6526 | 365 |
| 1996 | 1285 | 1142 | 1025 | 589 | 316 | 23 | 4 | 4 | 111 | 420 | 825 | 929 | 6673 | 366 |
| 1997 | 1239 | 891 | 992 | 607 | 346 | 91 | 6 | 3 | 114 | 461 | 817 | 1067 | 6834 | 365 |
| 1998 | 1059 | 900 | 836 | 528 | 210 | 79 | 0 | 3 | 65 | 396 | 704 | 921 | 5701 | 365 |
| 1999 | 1201 | 941 | 905 | 528 | 219 | 30 | 3 | 9 | 66 | 433 | 618 | 970 | 5923 | 365 |
| 2000 | 1320 | 1015 | 775 | 607 | 270 | 79 | 9 | 9 | 146 | 427 | 724 | 1236 | 6617 | 366 |
| 2001 | 1158 | 1013 | 1010 | 548 | 259 | 25 | 17 | 1 | 116 | 385 | 588 | 926 | 6046 | 365 |
| 2002 | 1019 | 934 | 871 | 516 | 301 | 99 | 8 | 19 | 54 | 497 | 770 | 1127 | 6215 | 365 |
| 2003 | 1442 | 1215 | 960 | 671 | 341 | 88 | 2 | 6 | 71 | 466 | 666 | 1038 | 6966 | 365 |
| 2004 | 1547 | 1040 | 913 | 535 | 244 | 74 | 5 | 15 | 100 | 449 | 720 | 1077 | 6719 | 366 |
| Average | 1235 | 1059 | 918 | 570 | 270 | 59 | 6 | 12 | 112 | 420 | 708 | 1065 | 6434 | 365.25 |
| 2004 vs. Avg | 312 | (19) | (5) | (35) | (26) | 15 | n/a | n/a | (12) | 29 | 12 | 12 | 285 | 0.75 |
| Percent | 25.3% | -1.8% | -0.5% | -6.1% | -9.6% | 25.4% | | | -10.7% | 6.9% | 1.7% | 1.1% | 4.4% | |

BROCKTON DIVISION

Bay State Gas Effective Heating Degree Days

Billing EDD BPT= 65

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual | Days |
|---------------|------|-------|-------|------|--------|-------|-----|-----|--------|------|------|-------|--------|--------|
| 1985 | 1224 | 1331 | 913 | 751 | 347 | 126 | 53 | 5 | 71 | 192 | 494 | 957 | 6464 | 365 |
| 1986 | 1262 | 1193 | 1061 | 701 | 438 | 142 | 45 | 7 | 96 | 255 | 566 | 951 | 6737 | 365 |
| 1987 | 1133 | 1261 | 1061 | 744 | 441 | 141 | 23 | 3 | 62 | 276 | 561 | 898 | 6604 | 365 |
| 1988 | 1206 | 1167 | 986 | 785 | 471 | 163 | 37 | 4 | 51 | 289 | 595 | 932 | 6686 | 366 |
| 1989 | 1186 | 1073 | 1076 | 789 | 448 | 108 | 22 | 7 | 37 | 269 | 489 | 1207 | 6691 | 365 |
| 1990 | 1318 | 984 | 963 | 799 | 419 | 212 | 28 | 5 | 50 | 160 | 477 | 817 | 6232 | 365 |
| 1991 | 1092 | 1062 | 900 | 691 | 336 | 81 | 16 | 2 | 49 | 244 | 498 | 828 | 5799 | 365 |
| 1992 | 1144 | 1189 | 971 | 873 | 474 | 176 | 24 | 13 | 49 | 284 | 618 | 921 | 6736 | 366 |
| 1993 | 1141 | 1251 | 1160 | 826 | 307 | 131 | 8 | 1 | 38 | 290 | 565 | 860 | 6578 | 365 |
| 1994 | 1403 | 1405 | 1096 | 733 | 387 | 159 | 3 | 7 | 69 | 266 | 393 | 830 | 6751 | 365 |
| 1995 | 1057 | 1154 | 1011 | 807 | 435 | 129 | 19 | 4 | 51 | 214 | 520 | 1065 | 6466 | 365 |
| 1996 | 1367 | 1227 | 1037 | 850 | 412 | 154 | 11 | 5 | 32 | 286 | 545 | 930 | 6856 | 366 |
| 1997 | 1116 | 1128 | 926 | 848 | 456 | 235 | 17 | 5 | 35 | 248 | 608 | 1014 | 6636 | 365 |
| 1998 | 1079 | 1049 | 890 | 696 | 367 | 129 | 21 | 2 | 22 | 218 | 550 | 751 | 5774 | 365 |
| 1999 | 1191 | 1047 | 983 | 711 | 380 | 105 | 16 | 4 | 21 | 245 | 505 | 777 | 5985 | 365 |
| 2000 | 1153 | 1294 | 836 | 696 | 433 | 202 | 28 | 10 | 48 | 271 | 531 | 1040 | 6542 | 366 |
| 2001 | 1274 | 1087 | 1022 | 844 | 328 | 178 | 11 | 10 | 42 | 231 | 490 | 714 | 6231 | 365 |
| 2002 | 1100 | 992 | 876 | 716 | 424 | 197 | 35 | 6 | 34 | 197 | 656 | 1032 | 6265 | 365 |
| 2003 | 1256 | 1379 | 1159 | 850 | 436 | 231 | 31 | 2 | 37 | 252 | 528 | 955 | 7116 | 365 |
| 2004 | 1228 | 1360 | 919 | 826 | 314 | 195 | 19 | 10 | 42 | 248 | 589 | 892 | 6642 | 366 |
| Average | 1197 | 1182 | 992 | 777 | 403 | 160 | 23 | 6 | 47 | 247 | 539 | 919 | 6490 | 365.25 |
| 2004 vs. Avg. | 31 | 178 | (73) | 49 | (89) | 35 | n/a | n/a | (5) | 1 | 50 | (27) | 152 | 0.75 |
| Percent | 2.6% | 15.1% | -7.4% | 6.3% | -22.1% | 21.9% | | | -10.6% | 0.4% | 9.3% | -2.9% | 2.3% | |

LAWRENCE DIVISION

Bay State Gas Effective Heating Degree Days

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual | Days |
|--------------|-------|-------|-------|-------|--------|-------|-----|-----|-------|------|------|------|--------|--------|
| 1985 | 1481 | 1046 | 924 | 563 | 267 | 111 | 3 | 37 | 138 | 446 | 715 | 1198 | 6949 | 365 |
| 1986 | 1267 | 1170 | 895 | 553 | 312 | 109 | 22 | 38 | 192 | 488 | 839 | 1052 | 6937 | 365 |
| 1987 | 1297 | 1188 | 958 | 625 | 302 | 82 | 5 | 35 | 125 | 498 | 733 | 1022 | 6870 | 365 |
| 1988 | 1296 | 1124 | 944 | 619 | 295 | 99 | 13 | 22 | 125 | 544 | 660 | 1158 | 6899 | 366 |
| 1989 | 1098 | 1111 | 989 | 662 | 234 | 79 | 1 | 17 | 126 | 395 | 789 | 1535 | 7036 | 365 |
| 1990 | 1059 | 1043 | 908 | 609 | 385 | 90 | 14 | 15 | 142 | 352 | 685 | 954 | 6256 | 365 |
| 1991 | 1269 | 963 | 886 | 513 | 190 | 59 | 3 | 9 | 189 | 376 | 689 | 1122 | 6268 | 365 |
| 1992 | 1248 | 1126 | 1039 | 671 | 361 | 56 | 29 | 19 | 173 | 506 | 786 | 1128 | 7142 | 366 |
| 1993 | 1238 | 1296 | 1068 | 576 | 240 | 64 | 3 | 3 | 167 | 513 | 755 | 1139 | 7062 | 365 |
| 1994 | 1619 | 1299 | 983 | 532 | 346 | 28 | 1 | 24 | 155 | 421 | 657 | 1016 | 7081 | 365 |
| 1995 | 1130 | 1227 | 928 | 683 | 331 | 45 | 8 | 24 | 197 | 345 | 851 | 1273 | 7042 | 365 |
| 1996 | 1355 | 1194 | 1071 | 634 | 344 | 36 | 8 | 4 | 113 | 424 | 834 | 975 | 6992 | 366 |
| 1997 | 1312 | 957 | 1056 | 654 | 364 | 98 | 11 | 6 | 145 | 509 | 888 | 1135 | 7115 | 365 |
| 1998 | 1141 | 950 | 868 | 558 | 229 | 103 | 0 | 7 | 85 | 437 | 750 | 988 | 6116 | 365 |
| 1999 | 1291 | 993 | 954 | 568 | 257 | 38 | 3 | 13 | 88 | 487 | 660 | 1039 | 6391 | 365 |
| 2000 | 1397 | 1079 | 816 | 627 | 321 | 97 | 21 | 17 | 172 | 469 | 759 | 1294 | 7069 | 366 |
| 2001 | 1238 | 1084 | 1066 | 597 | 287 | 42 | 19 | 2 | 141 | 412 | 650 | 966 | 6504 | 365 |
| 2002 | 1068 | 984 | 926 | 564 | 323 | 124 | 14 | 27 | 81 | 556 | 828 | 1191 | 6686 | 365 |
| 2003 | 1540 | 1278 | 1031 | 716 | 372 | 96 | 4 | 12 | 100 | 507 | 731 | 1098 | 7485 | 365 |
| 2004 | 1621 | 1097 | 941 | 566 | 270 | 92 | 11 | 32 | 131 | 490 | 775 | 1146 | 7172 | 366 |
| Average | 1298 | 1110 | 963 | 606 | 302 | 77 | 10 | 18 | 139 | 459 | 751 | 1121 | 6854 | 365.25 |
| 2004 vs. Avg | 323 | (13) | (22) | (40) | (32) | 15 | n/a | n/a | (8) | 31 | 24 | 25 | 318 | 0.75 |
| Percent | 24.9% | -1.2% | -2.3% | -6.6% | -10.6% | 19.5% | | | -5.8% | 6.8% | 3.2% | 2.2% | | 4.6% |

LAWRENCE DIVISION

Bay State Gas Effective Heating Degree Days

Billing EDD BPT= 65

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual | Days |
|---------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|--------|--------|
| 1985 | 1280 | 1336 | 963 | 811 | 401 | 158 | 61 | 12 | 99 | 234 | 552 | 1003 | 6990 | 365 |
| 1986 | 1308 | 1243 | 1085 | 715 | 457 | 175 | 55 | 9 | 120 | 310 | 638 | 999 | 7114 | 365 |
| 1987 | 1177 | 1307 | 1118 | 790 | 467 | 175 | 39 | 5 | 75 | 297 | 581 | 918 | 6949 | 365 |
| 1988 | 1259 | 1182 | 1015 | 795 | 477 | 182 | 50 | 6 | 65 | 301 | 590 | 954 | 6876 | 366 |
| 1989 | 1222 | 1081 | 1102 | 803 | 467 | 131 | 32 | 9 | 43 | 284 | 495 | 1245 | 6914 | 365 |
| 1990 | 1360 | 1048 | 999 | 821 | 453 | 248 | 50 | 7 | 62 | 200 | 517 | 867 | 6632 | 365 |
| 1991 | 1155 | 1116 | 940 | 729 | 366 | 110 | 25 | 3 | 63 | 282 | 535 | 904 | 6229 | 365 |
| 1992 | 1224 | 1246 | 1025 | 909 | 506 | 204 | 38 | 17 | 71 | 318 | 659 | 973 | 7190 | 366 |
| 1993 | 1206 | 1311 | 1216 | 872 | 351 | 181 | 12 | 3 | 48 | 338 | 617 | 918 | 7073 | 365 |
| 1994 | 1490 | 1503 | 1158 | 779 | 425 | 181 | 5 | 9 | 88 | 297 | 433 | 902 | 7270 | 365 |
| 1995 | 1133 | 1226 | 1079 | 861 | 480 | 157 | 27 | 12 | 81 | 267 | 560 | 1119 | 7002 | 365 |
| 1996 | 1425 | 1279 | 1091 | 890 | 448 | 175 | 21 | 9 | 32 | 289 | 543 | 960 | 7162 | 366 |
| 1997 | 1182 | 1202 | 989 | 910 | 492 | 241 | 23 | 9 | 47 | 292 | 649 | 1080 | 7116 | 365 |
| 1998 | 1161 | 1114 | 934 | 725 | 395 | 147 | 31 | 4 | 32 | 252 | 584 | 815 | 6194 | 365 |
| 1999 | 1275 | 1118 | 1029 | 765 | 412 | 129 | 19 | 6 | 28 | 288 | 552 | 828 | 6449 | 365 |
| 2000 | 1237 | 1364 | 881 | 728 | 471 | 240 | 38 | 20 | 66 | 308 | 564 | 1090 | 7007 | 366 |
| 2001 | 1342 | 1165 | 1091 | 895 | 356 | 212 | 15 | 12 | 56 | 247 | 532 | 780 | 6703 | 365 |
| 2002 | 1133 | 1059 | 919 | 768 | 463 | 225 | 46 | 11 | 49 | 242 | 715 | 1091 | 6721 | 365 |
| 2003 | 1340 | 1461 | 1225 | 912 | 475 | 249 | 34 | 4 | 54 | 292 | 582 | 1015 | 7644 | 365 |
| 2004 | 1299 | 1421 | 965 | 857 | 329 | 230 | 28 | 21 | 67 | 283 | 637 | 956 | 7093 | 366 |
| Average | 1260 | 1239 | 1041 | 817 | 435 | 188 | 32 | 9 | 62 | 281 | 577 | 971 | 6912 | 365.25 |

| | | | | | | | | | | | | | | |
|--------------|------|-------|-------|------|--------|-------|-----|-----|------|------|-------|-------|------|------|
| 2004 vs. Avg | 39 | 182 | (76) | 40 | (106) | 42 | n/a | n/a | 5 | 2 | 60 | (15) | 181 | 0.75 |
| Percent | 3.1% | 14.7% | -7.3% | 4.9% | -24.4% | 22.3% | | | 8.1% | 0.7% | 10.4% | -1.5% | 2.6% | |

SPRINGFIELD DIVISION

Bay State Gas Effective Heating Degree Days

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual | Days |
|---------------|-------|-------|-------|-------|--------|------|-----|-----|--------|------|-------|------|--------|--------|
| 1985 | 1452 | 1063 | 871 | 476 | 193 | 93 | 2 | 18 | 128 | 444 | 710 | 1233 | 6663 | 365 |
| 1986 | 1267 | 1172 | 886 | 461 | 189 | 68 | 17 | 36 | 129 | 446 | 860 | 1066 | 6597 | 365 |
| 1987 | 1323 | 1162 | 852 | 504 | 216 | 23 | 2 | 34 | 121 | 534 | 760 | 1070 | 6601 | 365 |
| 1988 | 1385 | 1144 | 902 | 584 | 201 | 84 | 8 | 21 | 114 | 595 | 724 | 1208 | 6970 | 366 |
| 1989 | 1155 | 1116 | 940 | 595 | 187 | 42 | 0 | 20 | 131 | 405 | 804 | 1560 | 6955 | 365 |
| 1990 | 1029 | 993 | 838 | 528 | 289 | 24 | 7 | 7 | 123 | 302 | 696 | 970 | 5806 | 365 |
| 1991 | 1263 | 954 | 840 | 405 | 120 | 30 | 1 | 0 | 183 | 365 | 721 | 1088 | 5970 | 365 |
| 1992 | 1235 | 1123 | 1034 | 631 | 251 | 40 | 14 | 17 | 162 | 526 | 783 | 1131 | 6947 | 366 |
| 1993 | 1213 | 1280 | 1032 | 497 | 149 | 44 | 0 | 1 | 165 | 487 | 758 | 1129 | 6755 | 365 |
| 1994 | 1561 | 1258 | 976 | 437 | 245 | 18 | 0 | 21 | 103 | 415 | 634 | 1006 | 6674 | 365 |
| 1995 | 1088 | 1174 | 810 | 588 | 223 | 17 | 0 | 4 | 162 | 306 | 878 | 1285 | 6535 | 365 |
| 1996 | 1353 | 1173 | 1037 | 514 | 252 | 9 | 3 | 4 | 136 | 459 | 856 | 989 | 6785 | 366 |
| 1997 | 1266 | 912 | 987 | 572 | 307 | 56 | 3 | 5 | 117 | 467 | 853 | 1118 | 6663 | 365 |
| 1998 | 1083 | 882 | 849 | 485 | 129 | 63 | 3 | 9 | 69 | 414 | 748 | 946 | 5680 | 365 |
| 1999 | 1287 | 997 | 909 | 502 | 163 | 16 | 0 | 15 | 87 | 449 | 635 | 1017 | 6077 | 365 |
| 2000 | 1381 | 1059 | 733 | 582 | 226 | 67 | 5 | 17 | 173 | 452 | 769 | 1314 | 6778 | 366 |
| 2001 | 1264 | 1107 | 1025 | 493 | 216 | 19 | 14 | 0 | 111 | 391 | 596 | 930 | 6166 | 365 |
| 2002 | 1019 | 921 | 857 | 475 | 282 | 76 | 1 | 15 | 55 | 507 | 783 | 1145 | 6136 | 365 |
| 2003 | 1457 | 1223 | 933 | 607 | 275 | 63 | 1 | 3 | 69 | 484 | 688 | 1087 | 6890 | 365 |
| 2004 | 1571 | 1086 | 885 | 506 | 170 | 48 | 2 | 10 | 84 | 481 | 744 | 1127 | 6714 | 366 |
| Average | 1283 | 1090 | 910 | 522 | 214 | 45 | 4 | 13 | 121 | 446 | 750 | 1121 | 6519 | 365.25 |
| 2004 vs. Avg. | 288 | (4) | (25) | (16) | (44) | 3 | n/a | n/a | (37) | 35 | (6) | 6 | 195 | 0.75 |
| Percent | 22.4% | -0.4% | -2.7% | -3.1% | -20.6% | 6.7% | | | -30.6% | 7.8% | -0.8% | 0.5% | 3.0% | |

SPRINGFIELD DIVISION

Bay State Gas Effective Heating Degree Days

Billing EDD BPT= 65

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual | Days |
|---------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|--------|--------|
| 1985 | 1233 | 1357 | 937 | 718 | 307 | 115 | 48 | 4 | 79 | 241 | 542 | 1017 | 6598 | 365 |
| 1986 | 1327 | 1235 | 1094 | 680 | 331 | 87 | 38 | 6 | 102 | 243 | 622 | 1022 | 6787 | 365 |
| 1987 | 1192 | 1307 | 1064 | 656 | 377 | 95 | 9 | 6 | 74 | 313 | 601 | 948 | 6642 | 365 |
| 1988 | 1341 | 1233 | 1014 | 741 | 423 | 130 | 33 | 5 | 65 | 303 | 659 | 1012 | 6959 | 366 |
| 1989 | 1269 | 1117 | 1082 | 759 | 398 | 85 | 17 | 10 | 46 | 291 | 508 | 1263 | 6845 | 365 |
| 1990 | 1364 | 997 | 949 | 757 | 346 | 168 | 12 | 4 | 48 | 155 | 507 | 876 | 6183 | 365 |
| 1991 | 1168 | 1103 | 920 | 659 | 275 | 49 | 10 | 0 | 47 | 285 | 547 | 882 | 5945 | 365 |
| 1992 | 1210 | 1239 | 1017 | 904 | 404 | 149 | 23 | 14 | 56 | 326 | 674 | 976 | 6992 | 366 |
| 1993 | 1195 | 1282 | 1194 | 813 | 251 | 135 | 5 | 0 | 46 | 325 | 608 | 915 | 6769 | 365 |
| 1994 | 1454 | 1457 | 1120 | 751 | 319 | 115 | 3 | 10 | 60 | 266 | 421 | 888 | 6864 | 365 |
| 1995 | 1105 | 1183 | 989 | 761 | 366 | 92 | 9 | 1 | 53 | 224 | 558 | 1129 | 6470 | 365 |
| 1996 | 1435 | 1276 | 1069 | 805 | 348 | 111 | 4 | 5 | 38 | 325 | 584 | 971 | 6971 | 366 |
| 1997 | 1156 | 1166 | 940 | 825 | 420 | 184 | 9 | 4 | 34 | 255 | 627 | 1059 | 6669 | 365 |
| 1998 | 1119 | 1056 | 888 | 676 | 286 | 101 | 12 | 4 | 26 | 233 | 575 | 785 | 5761 | 365 |
| 1999 | 1260 | 1111 | 1016 | 693 | 330 | 80 | 7 | 4 | 35 | 267 | 515 | 817 | 6135 | 365 |
| 2000 | 1200 | 1349 | 844 | 663 | 392 | 174 | 22 | 10 | 58 | 313 | 553 | 1105 | 6683 | 366 |
| 2001 | 1383 | 1180 | 1074 | 830 | 276 | 151 | 9 | 6 | 37 | 226 | 497 | 726 | 6395 | 365 |
| 2002 | 1108 | 980 | 864 | 692 | 388 | 174 | 25 | 2 | 29 | 204 | 667 | 1053 | 6186 | 365 |
| 2003 | 1268 | 1390 | 1158 | 805 | 362 | 183 | 20 | 0 | 26 | 270 | 543 | 992 | 7017 | 365 |
| 2004 | 1268 | 1399 | 937 | 790 | 277 | 118 | 12 | 8 | 28 | 262 | 618 | 925 | 6642 | 366 |
| Average | 1253 | 1220 | 1009 | 749 | 344 | 125 | 16 | 5 | 49 | 266 | 571 | 968 | 6576 | 365.25 |

| | | | | | | | | | | | | | | |
|---------------|------|-------|-------|------|--------|-------|-----|-----|--------|-------|------|-------|------|------|
| 2004 vs. Avg. | 15 | 179 | (72) | 41 | (67) | (7) | n/a | n/a | (21) | (4) | 47 | (43) | 66 | 0.75 |
| Percent | 1.2% | 14.7% | -7.1% | 5.5% | -19.5% | -5.6% | | | -42.9% | -1.5% | 8.2% | -4.4% | 1.0% | 1.0% |

BAY STATE GAS COMPANY

**Account Reactivation Fee
January - December 2004**

| | Regular Business Hours | | | |
|-------------------------------|-------------------------------|---------------------|--------------------|------------------------|
| | Count | Proposed Fee | Current Fee | Revenue Adjust. |
| Regular Business Hours | 4,651 | \$ 20.00 | \$ 15.00 | \$ 23,255.00 |
| After Business Hours | 1,160 | \$ 30.00 | \$ 20.00 | \$ 11,600.00 |
| TOTAL | | | | \$ 34,855.00 |

BAY STATE GAS COMPANY

**Account Reactivation Service Costs
(Turn-on after disconnection for non-payment)**

Normal Business Hours:

| | | <u>Minutes</u> | | |
|---|------------|-----------------|--|--|
| Direct Labor (D/L) Time: | | | | |
| Turn-on meter | | 27.73 | | (actual data through 12-mos Oct. 2004) |
| Non-productive | 15% | 4.16 | | (15% of D/L) |
| TOTAL | | 31.89 | | |
| | | <u>Costs</u> | | |
| @ \$ | 25.00 | \$ 13.29 | | (31.89 / 60 mins x \$25) |
| Fringe Benefits @ | 50% of D/L | \$ 6.64 | | (\$13.29 x 50%) |
| Fleet Cost @ | 20% of D/L | \$ 2.66 | | (\$13.29 x 20%) |
| Total D/L with fringes and fleet | | \$ 22.59 | | |

Note: Does not include overheads (tools, supervision, clerical, call center, dispatch, IT, etc.)

Outside Normal Business Hours:

| | | <u>Minutes</u> | | |
|---|-------------------|-----------------|--|--|
| Direct Labor (D/L) Time: | | | | |
| Turn-on meter | | 27.73 | | (actual data through 12-mos Oct. 2004) |
| Non-productive | 15% | 4.16 | | (15% of D/L) |
| TOTAL | | 31.89 | | |
| | | <u>Costs</u> | | |
| @ \$ | 37.50 / hr. | \$ 19.93 | | (31.89 / 60 mins x \$37.50) |
| Fringe Benefits @ | 50% of D/L | \$ 9.97 | | (\$19.93 x 50%) |
| Fleet Cost @ | 20% of Normal D/L | \$ 2.66 | | (\$13.29 x 20%) |
| Total D/L with fringes and fleet | | \$ 32.55 | | |

Note: Does not include overheads (tools, supervision, clerical, call center, dispatch, IT, etc.)

BAY STATE GAS COMPANY

Meter Test Costs

| | <u>Costs</u> | <u>Based on 2004 data</u> |
|-------------------------------|-----------------|--|
| Average Labor to Change Meter | \$ 28.07 | |
| Communications | \$ - | (included in Billing review total) |
| Meter Shop Costs * | \$ 16.26 | (2004 labor, state seal, transportation, handling) |
| Overhead @ 97.22% of D/L * | \$ 3.25 | |
| Billing Review | \$ 20.00 | (\$20 * 1 hr) |
| TOTAL | \$ 67.58 | |

* In 2004 42,454 units tested at total labor of \$142,085; per Unit Costs:

| | | |
|-----------------------------|----|-------|
| Labor - | \$ | 3.35 |
| State Seal - | \$ | 10.00 |
| Transportation - | \$ | 1.57 |
| Night Loader - | \$ | 0.78 |
| Handling Br to Law - | \$ | 0.56 |
| Total Meter Shop | \$ | 16.26 |
| Overhead 97.22% of Labor | \$ | 3.26 |

BAY STATE GAS COMPANY

Warrant and Locksmith Fees
January - December 2004

| Division | Count | Warrants | | | Locksmith Service | | |
|--------------|-------|---------------------------|------------------|--------------------|-------------------|-------------|--|
| | | Fees <i>(Proposed)</i> | Charged to Custs | Revenue Adjust. | Count | Fees to Co. | Proposed Fees <i>(Revenue Adj.)</i> |
| Brockton | 102 | \$ 4,080.00 | \$ 3,570.00 | \$ 510.00 | 102 | \$ 4,245.00 | \$ 4,080.00 |
| Springfield | 604 | \$ 21,140.00 | \$ 14,420.00 | \$ 6,720.00 | - | \$ - | \$ - |
| Lawrence | 8 | \$ 320.00 | \$ 280.00 | \$ 40.00 | 8 | \$ 240.00 | \$ 320.00 |
| TOTAL | 714 | \$ 25,540.00 | \$ 18,270.00 | \$ 7,270.00 | 110 | \$ 4,485.00 | \$ 4,400.00 |
| Avg Cost | | \$ 35.77 | \$ 25.59 | | | \$ 40.77 | \$ 40.00 |

* Reflects Warrants scheduled, some of which are not served and charged.